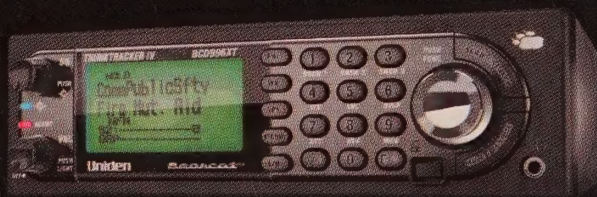
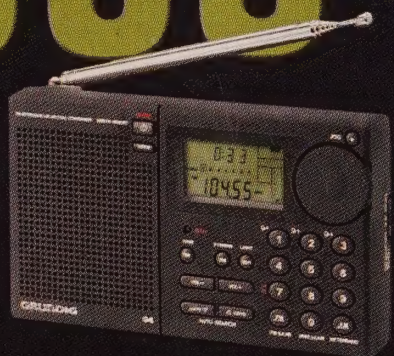


# GROVE



# 2009-2010





# SEE More and HEAR More!

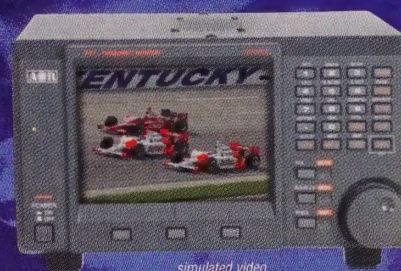
## With the SR2000A and AR8200MkIII from AOR

### SR2000A Color Frequency Monitor

The SR2000A is an ultra-fast spectrum display monitor that lets you SEE received signals in FULL color.

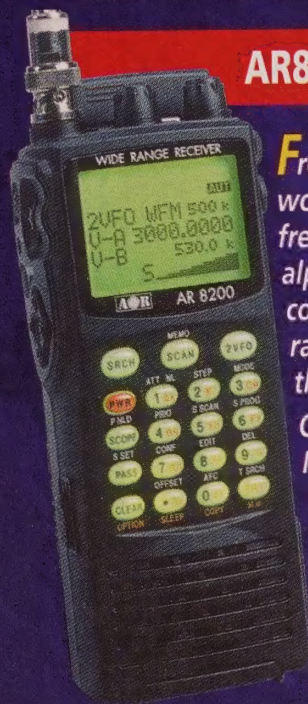
Using the power of FFT (Fast Fourier Transform) algorithms with a sensitive receiver covering 25MHz ~ 3GHz\*, the SR2000A features a color monitor that displays up to 40MHz spectrum bandwidth\*\*, a switchable time-lapse "waterfall" display or live video in NTSC or PAL formats.

Ultra sensitive, incredibly fast, yet easy to use with a high quality internal speaker for crisp, clean audio signals. Scans 10MHz in as little as 0.2 seconds! Instantly detects, captures and displays transmitted signals. PC control through RS232C serial port or USB interface. With 12 VDC input, it's perfect for base, mobile or field use.



simulated video

### AR8200MkIII Handheld Receiver



From inter-agency coordination to surveillance, you can't know too much. The world-class AR8200MkIII portable receiver features a TXCO that delivers solid frequency stability and performance not found in most desktop units. With 1,000 alphanumeric memory channels, it covers 500 KHz ~ 3GHz\*. Improved RF circuits combine greater sensitivity, resistance to intermod and enhanced Signal to Noise ratio. It offers increased audio frequency response and includes NiMH AA batteries that can be charged while the unit is in use.

Optional internal slot cards expand the AR8200MkIII's capabilities. Choose from Memory Expansion (up to 4,000 memories), CTCSS Squelch and Search, and Tone Eliminator.

The AR8200MkIII offers "all mode" reception that includes "super narrow" FM plus wide and narrow FM in addition to USB, LSB, CW and standard AM and FM modes. It also features true carrier reinsertion in USB and LSB modes and includes a 3KHz SSB filter. The data port can be used for computer control, memory configuration and transfer, cloning or tape recording output.

A special government version, AR8200MkIII IR features infra-red illumination (IR) of the display and operating keys. The IR illumination function is selectable, allowing operation by users wearing night vision apparatus without removing goggles and waiting for the eyes to re-adjust. Ideal for military, law enforcement and surveillance operators.



Authority on Radio  
Communications

AOR U.S.A., Inc.

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Tel: 310-787-8615 Fax: 310-787-8619  
info@aurusa.com <http://www.aurusa.com>

\* Government version, cellular blocked for US consumer version.

\*\*No audio is available when the frequency span is set to 20MHz or 40MHz.  
Specifications subject to change without notice or obligation.

SEE more and HEAR  
more with AOR, the  
serious choice in  
Advanced Technology  
Receivers™.



# WELCOME TO THE 2010 GROVE CATALOG

It's hard to believe that our company started nearly three decades ago. We're thankful that our customer service and excellent product selection at affordable prices has resulted in enormous customer support, even with the hard times many of us are facing with the economic slump.

Hard times are faced by many of our clients, and we understand that. But the communications industry is still very viable; we will continue to provide what you want. Even better, we are adding substantially more products to our line!

A recent, in-depth poll of the subscribers to our flagship magazine, **Monitoring Times**, and its growing electronic edition, **MTXpress**, reveals a change in consumer electronics. We take this seriously, and our new catalog reflects some of these changes.

One of the biggest surprises came from the ham radio sector; you folks really do make up a sizable number of our readership, and we will be providing more ham gear for you. While this catalog touches on many of the products we sell, there isn't room for all of them. That's why we urge you to visit the Grove website: [www.grove-ent.com](http://www.grove-ent.com).

And for our substantial band of Monitoring Times subscribers, now is the time to consider the electronic edition! **MTXpress** has grown substantially, with its special edition **MTXtra**, offering listening opportunities like foreign language broadcasting which aren't in the MT print version.

• Due to rapidly-fluctuating changes in the international economy, printed prices are subject to change without notice.

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Grove Enterprises remains a leader in the listening field, not only for hobby radio fans, but for government and military agencies as well. Electronic communications is here to stay, and so are we.

*Bob & Judy Grove*

## GOVERNMENT, MILITARY, and PROFESSIONAL CLIENTS

Our web site is the primary source of information for our many government and professional clients. Full-frequency-coverage scanning receivers, high-end reception equipment, accessories, test equipment, and other products for eligible agencies will be found at [www.grove-ent.com](http://www.grove-ent.com).



# SCANNERS

HAND-HELD BASE/MOBILE WIDE FREQUENCY COVERAGE

## Uniden BCD-996XT Mobile Trunking Scanner

TrunkTracker IV with Control-Channel Only scanning and I-Call monitoring: Tracks voice traffic on P25, Motorola, EDACS, and LTR Trunked systems / APCO25 Digital Audio decoding / Support for P25 Conventional channels that include NAC and TGID user differentiation (P25 One-Frequency Trunk) / EDACS ESK support / Close Call RF Capture / Coverage: 25.0000 - 512.0000, 758.0000 - 823.9875, 849.0125 - 868.9875, 894.0125 - 960.0000, 1240.0000 - 1300.0000 MHz



**Order SCN21**  
**Only \$499.95**

### Suggested Accessories:

ANT50 - Procomm CD144MBN Mobile Antenna ..... \$19.95  
SFT19 - Scancat Lite ..... \$29.95  
CBL14 - Uniden USB-1 USB Cable ..... \$24.95  
DCC03 - DC to DC Universal Adaptor ..... \$12.95

## Uniden BCD396XT Handheld Trunk Tracker

TrunkTracker IV with Control-Channel Only scanning and I-Call monitoring: Tracks voice traffic on P25, Motorola, EDACS, and LTR Trunked systems / APCO25 Digital Audio decoding / Support for P25 Conventional channels that include NAC and TGID user differentiation (P25 One-Frequency Trunk) / EDACS ESK support / Close Call RF Capture / Coverage: 25.0000 - 512.0000, 758.0000 - 823.9875, 849.0125 - 868.9875, 894.0125 - 960.0000, 1240.0000 - 1300.0000 MHz



**Order SCN53**  
**Only \$499.95**

### Suggested Accessories:

CAS09 - Nylon Case for BC396T ..... \$19.95  
CAS13 - Hard leather case w/ swivel clip ..... \$29.95  
CAS14 - Hard Leather Case w/ belt loop ..... \$19.95  
CBL14 - Uniden USB-1 USB Cable ..... \$24.95  
ANT50 - Procomm CD144MBN Mobile Antenna ... \$19.95  
DCC03 - DC to DC Universal Adaptor ..... \$12.95  
DCC19 - Uniden UA-72 DC Power Cord ..... \$19.95

\*Motorola® Astro®, SMARTNET®, SMARTZONE®, and PRIVACY PLUS®, M/A-COM Private Radio Systems Inc. EDACS® Wide, Narrow, and SCAT, and E.F. Johnson Co. LTR systems.\*

## Uniden BCT-15X

TrunkTracker III for Motorola Type I 800, Motorola Type II 800, 900, UHF, VHF (including rebanded 800 MHz systems), EDACS Wide (standard), Narrow, SCAT (including systems that use an EDACS System Key), LTR / State-by-State Preprogrammed Channels - let you easily keep up with activity on local police, Department of Transportation, and Highway Patrol frequencies when you travel, without having to program any channels. / Close Call, with Close Call Do Not Disturb, Close Call Priority (or Primary), and Close Call Temporary Store / Coverage: 25.0000 - 512.0000, 758.0000 - 823.9875, 849.0125 - 868.9875, 894.0125 - 960.0000, 1240.0000 - 1300.0000 MHz



**Order SCN31**  
**Only \$219.95**

### Suggested Accessories:

ANT50 - Procomm CD144MBN Mobile Antenna ..... \$19.95  
CBL14 - Uniden USB-1 USB Cable ..... \$24.95  
DCC03 - DC to DC Universal Adaptor ..... \$12.95

## Uniden BC898T

The BC898T is designed to track the following types of analog trunking systems: Motorola Type I, Type II, Type III, Hybrid, SMARTNET™, and PRIVACYPLUS™; LTR trunking systems; EDACS and EDACS/SCAT; will not decode APCO P-25. 500 memory channels in 10 banks; receives 25-54, 108-174, 216-512 and 806-956 MHz (less cellular); decodes DCS and CTCSS squelch tones; and provides S.A.M.E. weather alert.



**Order SCN44**  
**Only \$194.95**

### Suggested Accessories:

ANT07 - Scantenna (50' cable & BNC) ..... \$49.95  
ANT03 - Grove Scanner Beam III ..... \$69.95  
DCC03 - DC to DC Universal Adaptor ..... \$12.95

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fax: (828) 837-2216 email: [order@grove-ent.com](mailto:order@grove-ent.com) web: [www.grove-ent.com](http://www.grove-ent.com)

Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



## Uniden BC346XT

The BC346XT will replace the BC246T as Uniden's flagship handheld analog Trunk Tracker. Touting 9,000 channels organized using Uniden's own Dynamic Memory model the BC346XT simplifies scanner programming by modeling the scanner's memory organization after the real world.

The BC346XT also adds GPS support for automatic control of radio features based on location, a first in the industry for a handheld scanner, and a feature Uniden pioneered with the last generation of mobile scanners.

Some of the new features on the BC346XT that weren't on the BC246T are: EDACS ESK support / Control Channel Data Output - allows the analysis of control channel data without the need to perform invasive modifications to the scanner / GPS Support for location-based scanning, location alerts, and crows-flight navigation / Independent GPS Control of Sites and Channel Groups / Fire Tone Out Alert / Fire Tone Out Search - built-in frequency counter displays the received tones / Band Scope - gives a graphic representation of signal activity / Multi-Site support / Temporary Lockout / Startup Configuration / System, Channel Number Tagging - provides rapid access to a specific system or channel.



### Suggested Accessories:

ANT14 - Austin Condor Antenna .....	\$34.95
CAS08 - Nylon carry case .....	\$21.95
CAS11 - Hard Leather Case w/swivel Clip .....	\$29.95
CAS12 - Hard Leather Case w/belt loop .....	\$19.95
CBL14 - Uniden USB-1 USB Cable .....	\$24.95
SFT19 - Scancat Lite .....	\$29.95
DCC19 - Uniden UA-72 DC Power Cord .....	\$19.95
DCC03 - DC to DC Universal Adaptor .....	\$12.95

**Order SCN45**  
**Only \$219.95**

## Uniden BCT8

The BCT8 is a state-of-the-art Trunk Tracking Scanner with BearTracker technology which will alert you when the highway patrol is within approximately a 3 mile radius. It can store 250 frequencies such as police, fire/emergency, marine, railroad, air, amateur, and other communications into 5 banks of 50 channels for a total of 250 channels. add: 25-54; 108-174; 400-512; 806-956 MHz (less cellular)

### FEATURES

- Pre-programmed frequencies specific to each state (except Hawaii), Trunked and conventional Highway Patrol frequencies.
- Highway Patrol Priority Alert - Receive audible and visual alert when within three miles of many Highway Patrol/State units.
- Pre-programmed for: Local Police and County Sheriffs; Fire and Emergency Medical Service; News Media; Weather (continuous NOAA weather and Canadian Coast Guard broadcasts); CB Radio; Aircraft; Railroads; Marine Band; Department of Transportation
- Trunk Tracking - Follow VHF High Band UHF 800MHz trunked public safety and public service systems just as if conventional two-way communications were used.
- Multi-Track - Track more than one trunking system at a time. Scan conventional and trunked systems at the same time.
- Data Skip - Allows your scanner to skip unwanted data transmissions and reduces birdies.
- Turbo Search - Increases the search speed to 300 steps per second. This applies only to transmission bands with 5 kHz steps.
- PC Programmable - Allows you to easily program all frequencies and Trunking Talk Groups into your BCT8 through Uniden BCT8 Scanning software running on your PC. (RS232C cable not included)

**Supplied Accessories:** AD 140U-AC Adapter, DC Power Cord, CD007 Cigarette Lighter Adapter Plug, Telescopic Antenna, Window Mount Antenna, Operating Guide, Trunk Tracker Frequency Guide, BCT 8 Software V 1.0 (OS W98SE, ME, 2000, XP)

### Suggested Accessories:

SFT19 - Scancat Lite .....	\$29.95
ANT50 - Procomm CD144MBN Mobile Antenna ...	\$19.95

**Order SCN08**  
**Only \$162.95**



## Ramsey ABM1 Aircraft Monitor



Monitor the entire 118-137 MHz civilian aircraft band at once, and there's no oscillator that could cause navigational interference on an aircraft! High sensitivity brings in all VHF aircraft signals within miles with no visible antenna (the ear bud cord is its antenna)! Adjust the volume to comfortable listening; set the squelch to limit distance; wear the inconspicuous monitor on a belt or in your pocket. Ideal for air shows, airline trips, air traffic monitoring.

Measuring only 2-1/2" x 4-1/2", the Ramsey ABM1 Aircraft Monitor runs off a 9-volt battery (not included); full operational/technical manual and privacy ear buds are supplied.

**Order SCN05**  
**Only \$149.95**

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## PSR-100/200 SCANNER!

Available as a hand-held (PSR-100) or desktop/mobile (PSR-200) configuration, this low-cost scanner provides top performance at a bottom price for rural areas with traditional communications requirements. Frequency coverage 29-54, 108-174, and 380-512 MHz for land mobile and aircraft monitoring.

200 memory channels scannable at 45 channels per second; 10 digit channel and frequency display with function icons; priority; SAME weather alert with Skywarn function; up/down search; 2 second delay; manual frequency tuning; key-press tone; back-lit LCD; PC programmable and cloning. Includes whip antenna, AC adaptor and manual. PSR-100 also includes belt clip, 2 battery holders; 4 AA cells required.

PSR-100



**PSR-100**  
**Order SCN16**  
**Only \$99.95**

**PSR-200**  
**Order SCN17**  
**Only \$99.95**

PSR-200



## PSR-300/400 SCANNER!

Available as a hand-held (PSR-300) or desktop/mobile (PSR-400) configuration, this mid-range scanner provides top performance with a wide frequency range, but still offers a low price. Frequency coverage: 25.00000-54.00000 MHz, 108.00000-136.99166 MHz, 137.00000-174.00000 MHz, 216.00250-299.93750 MHz, 300.00000-512.00000 MHz, 764.00000-960.00000 MHz, 1240.00000-1300.00000 MHz (less cellular). 1500 memory channels, New 700MHz coverage and Upgradeable CPU firmware for future rebanding, Multi trunking of Motorola (type I, II and hybrid analog system), EDACS wide and LTR.

Accessories include Rubber antenna, Owner's manual, Normal Battery holder, Re-charge Battery holder and Belt clip.

PSR-300



**PSR-300**  
**Order SCN13**  
**Only \$179.95**

**PSR-400**  
**Order SCN14**  
**Only \$179.95**

PSR-400



## GRE PSR-500/600 SCANNER!

Available either as a hand-held (PSR-500) or desktop/mobile (PSR-600) configuration, this top-of-the-line scanner sets new standards in the industry! With 25-54, 108-174, 216-512, 764-960 (less cellular) and 1240-1300 MHz frequency coverage, this is the pick for new narrow-band, spectrum-reformed scanning!

Customize your scan list's 37,800 memory channels for up to 1800 conventional or trunking entries without object limits; on-screen programming assistance; upgradable free software as available from GRE; follow trunking from Motorola, LTR, P25 9600 baud, and EDACS wide/SCAT/narrow networks in any land-mobile band; third-party-software remote controllable; tri-color LED alarm/alert custom-programmable.

Adaptive digital tracking instantly compensates for multipath or fading distortion; digital AGC provides even-level audio regardless of mode; DSP subaudible squelch in DCS and CTSS eliminates squelch tail; high-speed USB cloning; Spectrum Sweeper latches on to nearby transmissions; signal strength indicator; 4 rows of 16 characters each on high-contrast LCD display; SAME/hazards weather alert with single-button access to storm spotter frequencies.

This triple-conversion scanner has selectable 20 dB attenuation for overload situations; multiple priority channels; scan at 55 channels per second; service and frequency search at 90 channels per second; backlit LCD and keypad. Includes whip antenna, AC adaptor and manual.

PSR-500 also includes belt clip, 2 battery cases; 4 AA cells required.

PSR-500



**PSR-500**  
**Order SCN18**  
**Only \$449.95**

**PSR-600**  
**Order SCN19**  
**Only \$449.95**

PSR-600



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## AOR AR8200 Mk III

The AR8200 Mark III leaves others behind, with a Temperature Compensated Crystal Oscillator that maintains frequency stability without regard to changing ambient temperatures. A new keyboard layout, improved illumination allow easy operation in a variety of conditions and new telescopic antenna included for better reception.

### FEATURES:

- Frequency coverage 500kHz-3GHz (Cellular Blocked)
- All mode reception with Super narrow FM plus Wide and Narrow AM in addition to the standard modes
- True carrier re-insertion in SSB modes
- Detachable MW bar aerial with negative feedback
- Tuning steps programmable in multiples of 50Hz in all modes, 8.33kHz Airband step correctly supported
- Versatile band scope with save trace facility & Twin frequency readout with bar signal meter
- Arrow 4-way side rocker with separate main tuning dial
- Configurable keypad beep / illumination & LCD contrast
- Programmable scan & search including LINK, FREE, DELAY, AUDIO, LEVEL, MODE
- Computer socket fitted for control, clone & record, Flash-ROM memory (no battery required)

**Supplied Accessories:** Whip Antenna, MW Bar Aerial, 4 AA NiCad Batteries, AC Charger, Cigarette Adapter, Hand Strap, Belt Hook with 2 screws, Operating Manual.

### Suggested Accessories:

ACC24 - CT8200 CTCSS decoder .....	\$94.95
ACC25 - AOR TE8200 Tone Eliminator .....	\$54.95
ACC27 - AOR EM8200 Extended Memory .....	\$74.95
ANT11 - AOR DA3000 Wideband Discone .....	\$139.00
ANT12 - AOR MA500 Wideband Whip .....	\$99.00
ANT39 - AOR SA7000 Base/Portable Ant.....	\$229.95
CAS21 - Hard leather case LC8200 .....	\$21.95
CAS25 - Soft leather case SC8200P .....	\$12.95
CBL07 - AOR CR8200 Tape Recording Cable ..	\$54.95
CBL08 - Computer control lead CC8200.....	\$99.95
CBL13 - AOR IF-8200 Data Cable .....	\$20.00
PWR24 - AOR AA8000 AC Adaptor .....	\$25.00
SFT02W - Scancat Gold for Windows .....	\$99.95



**Order SCN51**  
**Only \$629.95**

**Government agencies order**  
**SCN51-G Only \$629.95**

## ICOM R20

### FEATURES:

Frequency coverage 150KHz - 3.3 GHz (less cellular)  
Modes of SSB/CW/AM/FM/WFM  
Dual watch capability in specific bands  
IC audio recorder built-in with selectable recording times of 1, 2 or 4 hours.  
CTCSS/DTCS/DTMF decode  
1250 memory channels: 1000 memory, 25 scan edge, 200 auto-write scan  
Pre-programmed TV  
Audio channels  
Voice Scan Control  
Auto squelch function  
AND MORE.....

### Suggested Accessories:

BAT04 - BP-206 Li-Ion Battery Cell Assembly .....	\$51.95
DCC18 - CP-18A DC cord/Cigarette Lighter Cable .....	\$24.95
CAS07 - LC-158 carrying case .....	\$23.95
SFT13 - CS-R20 cloning sw + OPC-1382 cable (USB) .....	\$44.95



**Order SCN20**  
**Only \$519.95**

**Government agencies order**  
**SCN20-G Only \$549.95**

## Yaesu VR500

### MINIATURE HIGH-PERFORMANCE MONITORING STATION

Yaesu's years of hand-held transceiver design know-how bring you the ultra-compact VR-500 Receiver, measuring just 2.28" x .95" x 3.74" (58 x 24 x 95 mm) and weighing less than 1/2 lb. (220 g)! Take the VR-500 anywhere you go...and stay on top of the action!

### WIDE BAND MULTI-MODE FREQUENCY COVERAGE

Providing continuous\* frequency coverage from 100 kHz through 1299.99995 MHz, the VR-500 includes reception of narrowband FM, wideband FM (for broadcast/TV), SSB (USB/LSB), CW, and AM. \* Cellular frequency blocked, which cannot be restored.

- Continuous coverage: 100 kHz to 1299.99995 MHz!
- All mode reception: FM, Wide-FM, USB, LSB, CW, and AM!
- Huge memory capacity: 1091 Channels!
- 1 MHz Fast Steps for quick frequency excursions.
- Front-End 20dB attenuator
- RF Squelch control
- Power on / off timers
- Adjustable battery saver
- Clone capability
- Computer Control



**Order SCN06**  
**Only \$219.95**

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Technical Questions? (828) 837-9200 or tech@grove-ent.com. Due to high call volume, technical calls will be limited to 3 minutes.



## ICOM R5 - Sport

Crisp, clear audio. Super wide tuning range. A large, easy-to-read LCD display with the visual information you need - like operating status, signal strength, battery indicator, and alphanumeric naming for the 1250 memory channels (including 200 auto-write scan memories, and 25 scan edge pairs). Weather Alert keeps you informed of any weather emergencies. All in a compact, weather resistant package.

This little piece of electronic magic answers the request of the race car fan for a shirt-pocket-sized radio capable of storing the entire race field in one scanning bank. And, with each memory bank being soft portioned, you can program in the driver's name! Sweep the "pits" for additional frequencies with the 'R5's Auto Memory Write. 495 kHz-1310 MHz {less cellular}.

**Supplied Accessories:** 2-Ni-Cd Cells, AC Adapter, Handstrap, Antenna, Belt Clip on US versions.



### Suggested Accessories:

ACC03 - OPC-478 Computer Interface \$34.95  
ACC05 - USB Interface OPC-478U .....\$49.95  
ADP33 - BNC female to SMA adaptor ..\$3.99  
CAS20 - Soft Case LC146A .....\$19.95  
SFT12 - Cloning Software CS-R5.....\$34.95  
DCC18 - ICOM CP-18 DC Adaptor .....\$24.95

**Order SCN12**  
**Only \$174.95**

**Government agencies order SCN12-G**

## Alinco DJ-X2000T

Alinco's DJX2000T hand-held scanner uses cutting-edge technology to offer features not found in other scanners!



- 100 kHz-2150 MHz frequency coverage {less cellular}
- Built-in band scope displays signals occupying 40 channels above and below your tuned frequency
- Flash Tune/frequency counter instantly monitors nearby 50-1300 MHz transmissions and displays frequencies
- Digital audio recorder stores nearly 3 minutes of received audio--or built-in mike pickup--for playback
- 2000 memory channels in 50 40-channel banks, cross-selectable by frequency or service
- Bar graph signal-strength indicator

**Supplied Accessories:** Manual, Antenna, Stand-up Charger, Ni-Cad Battery Pack, Belt Clip, Carrying Strap.

**Order SCN10**  
**Only \$539.95**

**Government agencies order SCN10-G, \$589.95**

## Alinco DJ-X7



With continuous 100kHz-1300MHz frequency coverage (less cellular), you can catch the action on fire, public safety, traffic and many other frequencies, or just enjoy favorite music and news on broadcasting/TV stations with a credit-card-size scanner that fits in your shirt-pocket! This unit features 1000 memory channels, pre-set AM/FM/TV channels and 5 scan modes.

### Suggested Accessories:

CAS10 - Alinco ESC-38 Softcase .....\$14.95  
DCC10 - Alinco EDH-32 Cigar-socket DC cable \$15.95  
CBL01 - Alinco ERW-4C PC Interface Cable.....\$44.95

**Order SCN03**  
**Only \$179.95**

**Government agencies order SCN03-G**

## Alinco DJ-X3TD



There's a world of adventure riding the airwaves and Alinco's DJ-X3 puts you in the middle of the action. Ride along with pilots of jet aircraft. Listen to the fire brigade battling against time to save lives. Get tomorrow's news today from short wave foreign broadcasts. Listen to ham radio operators enjoying their hobby. Be there when the police bring a criminal to justice. Attach optional stereo headphones or amplified speakers and enjoy a stereo FM transmission featuring your favorite music. But wait, there's more! Your DJ-X3 can help you find hidden transmitters that may bug your home, office or hotel room. You can also decode inversion scrambled signals.

**Order SCN11**  
**Only \$179.95**

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# RECEIVERS

## ICOM R-1500 Mobile/Base Receiver

This receiver covers from 0.01 to 3299.999MHz (less cellular on consumer model) in all modes (0.495-1300MHz only in SSB and CW modes) and versatile functions such as multi-channel monitor, band-scope and IF shift function support efficient and effective reception. PC connection with the USB cable is possible to allow PC interface operation, if desired.

### FEATURES

**Wideband receiver:** 0.01–3299.999MHz (less cellular on consumer model) in all modes (0.495–1300MHz only in SSB and CW modes). 1Hz fine tuning resolution is available in all bands. When connected to a PC, all functions are controllable from mouse click or keyboard input.

**Ultra wideband coverage:** The IC-R1500 is a PC control receiver and all functions are controllable from mouse click or keyboard. It covers 0.01 to 3299.999MHz (less cellular on consumer model) in AM, FM and WFM modes and also covers 0.495 to 1300MHz\* in SSB and CW modes.

**USB cable connection:** The USB cable provides higher data transmission and quick response. It is also possible to transfer the received audio to the connected PC via the cable and allow you to hear from the PC speakers or record the sound on the PC.

**Multi channel monitor function:** Up to 25 channel activities can be observed on the multi-channel monitor screen at a glance. According to the S-meter level, each channel status is visually displayed by three background colors. When you click a busy channel, you can easily start listening to the selected channel.

**Remote controller head:** The IC-R1500 is supplied with remote control head for mobile or base station use. Green, amber and yellow backlit color are selectable allowing the user visual enjoyment to compliment their listening.



**Order RCV25  
Only \$599.95**

Government agencies order RCV25-G

## ICOM R-2500 Mobile/Base Receiver

Dual watch capability The IC-R2500 has dual watch receive capability\*1, allowing you to receive two bands simultaneously. It covers 0.01–3299.999 MHz (less cellular on consumer model) in AM, FM, WFM, SSB, CW, DV\*2 and P25\*3 modes on the main receiver, while the sub-receiver covers 50–1300MHz in AM, FM and WFM modes\*4.

\*1 Two antennas are required for dual watch receive.

\*2 Optional UT-118 required.

\*3 Optional UT-122 required.

\*4 Frequency range differs depending on version.



Diversity receive capability The diversity receive\* mode is useful for mobile operation where the received signal changes continuously. It compares the signal strength and chooses the antenna with the better signal to maintain good sound

and receive quality. \* Two antennas are required. Available in FM/DV/P25 mode between 50–1300MHz only. Diversity reception is not available while using dual watch.

**Wide LCD display** for independent band control The wide LCD display shows both main/sub receiver settings in an easy-to-read symmetric side-by-side layout. The controller provides separate tuning, volume, squelch knobs and function buttons for the left (Main) and right (Sub) receivers. The LCD backlit color is selectable between amber and green for your preference.

**Digital mode reception** The optional UT-118 D-STAR digital unit and UT-122\* P25 digital unit provide the latest digital mode reception. Catch the action in digital communications!

**1000 alphanumeric memory channels** With Icom's Dynamic Memory Scan, DMS, you have a versatile memory channel management system at your command. The 1000 memory channels can be arranged by service or personal preference in the 21 memory banks. Selectively link the channels together to scan depending on your needs.

### Suggested Accessories:

ACC16 - ICOM UT-106 DSP Unit .....	\$139.95
CBL12 - ICOM OPC-441 Speaker Extension Cable .....	\$27.95
DCC12 - ICOM CP-12L DC Power Cord .....	\$29.95
ACC07 - ICOM UT-122 P-25 digital unit .....	\$199.95

**Order RCV52  
Only \$899.95**

Government agencies order RCV52-G Only \$999.95

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Technical Questions? (828) 837-9200 or tech@grove-ent.com. Due to high call volume, technical calls will be limited to 3 minutes.



## PERSEUS SDR

Measuring only 4-1/4"W x 1-1/2"H x 7-1/4"D, and weighing a mere 13 ounces, the software-defined Perseus is high-performance, 0.39  $\mu$ V sensitivity, 10 kHz-30 MHz, all-mode communications receiver with +31 dBm IP3, 100+ dB dynamic range, and 90 dB image rejection for overload immunity.

It features a lab-grade spectrum analyzer function with a span of up to 800 kHz (1600 kHz software upgrade expected soon) and a resolution bandwidth adjustable from 0.4-800 kHz. Optional frequency extenders for VHF and UHF are being released as well.

Other spectrum-displaying receivers show signals pop up on your spectrum display, then disappear before you can tune them in. But like the powerful surveillance receivers used by government and military intelligence agencies, the Perseus can actually perform pre-detection recording, saving to your hard drive all the signals in a swath of spectrum in real time for you to tune, monitor and analyze later with the Perseus advanced software!

Ideal for broadcast and utility DXing, SETI research, contesting, propagation studies, SIGINT and serious signals surveillance as well.



Its 14 bit 80 MS/s A/D converter, high-performance FPGA-based down-converter, and high-speed 480 Mb/s USB2.0 PC interface operate under Windows 2000, XP, or Vista. Audio is via the PC soundcard or on-board audio. A universal 120/240 VAC 50/60 wall adaptor is included. The antenna connector is a BNC.



**Order RCV57**  
**Only \$1199.00**

## AOR 8600 MkII

Wideband, compact, multimode—all in one versatile package! Redesigned for improved sensitivity, dynamic range, internal rejection and audio quality. The AR8600 Mk II covers 100 kHz to 3000 MHz (less cellular on consumer models), and can be used mobile, base, or trans-portable. All-mode receive capability is combined with enormous operational flexibility, including computer control capability.

- Frequency coverage 100 kHz-3000 MHz no gaps (Cellular blocked) • All-mode reception of AM (wide and narrow), FM (wide, narrow, and super-narrow), USB, LSB, CW • High-stability TCXO-SSB with true carrier re-insertion • Versatile band scope with save-trace facility, Twin frequency readout with bar signal meter • Improved front end with VHF preselection • Detachable MW bar aerial • On/off display dimmer • Tuning steps programmable in multiples of 50 Hz in all modes • Noise limiter & attenuator • Write protect & keypad lock • Programmable scan & search • RS232 computer socket, Flash-

ROM memory (no battery required) • Slot card sockets for AOR accessory upgrades

**Order RCV11**  
**Only \$919.95**



### Suggested Accessories:

ACC22 - AOR P25-8600 APCO 25 Decoder.....	\$178.95
ACC24 - CT8200 CTCSS decoder .....	\$94.95
ACC25 - TE8200 tone eliminator .....	\$54.95
ACC27 - EM8200 extended memory card.....	\$74.95
ADP09 - F to BNC adaptor .....	\$2.99
ANT39 - AOR SA7000 Base/Portable Ant.....	\$229.95
BRK01 - Mobile Mounting Bracket MM8600 .....	\$65.00
DCC01 - DC8600 DC cigarette lighter cable .....	\$12.95
FTR02DS - Collins Mechanical Filter (2.5kHz) .....	\$109.00
FTR04DS - Collins Mechanical Filter (6.0kHz) .....	\$109.00
PWR01 - AOR AA8600 AC Power Supply .....	\$43.00

Government agencies order RCV11-G

## AOR AR5000A +3B

The AR5000A+3B triple-conversion receiver is acclaimed for its strong-signal handling, high sensitivity, sharp selectivity, extraordinary frequency coverage (10 kHz-3000 MHz, less cellular), compact size, frequency accuracy, long-term stability, and durability.

- AM, AM Synch, NFM, WFM, USB, LSB/CW
- Five Independent VFOs
- 2000 Memory Ch: 10 Banks; 1 Priority Ch
- 20 Search Banks with Auto-Memory Store
- Scan/Search Speed 45 channels/second (max.)
- 2100 PASS Freqs may be stored in EEPROM
- DTMF Decoder

**Order RCV44-P**  
**Only \$2709.95**

Government  
agencies order  
RCV44-PG  
Only \$2749.95

### Suggested Accessories:

ACC30 - AS5000 Antenna relay switch .....	\$119.00
ACC96 - CT5000 CTCSS decoder .....	\$99.00
ADP02 - F to PL259 Adaptor .....	\$3.99
ADP03 - F to N Adaptor .....	\$3.99
ANT08 - PAR High-Performance Shortwave Ant.....	\$66.95
ANT11 - AOR DA3000 Wideband Discone .....	\$139.00
ANT55 - AOR LA-390 .....	\$379.95
CBL05 - CR5000 recording cable.....	\$29.00
FTR01DS - Collins Mechanical Filter (500hz) .....	\$109.00
FTR02DS - Collins Mechanical Filter (2.5kHz) .....	\$109.00
FTR03DS - Collins Mechanical Filter (4.0kHz) .....	\$109.00
FTR04DS - Collins Mechanical Filter (6.0kHz) .....	\$109.00
TST10DS - AOR SDU5600 Spectrum Display.....	\$1499.95





## ICOM R-75

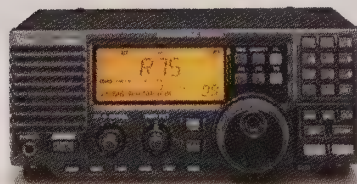
### FEATURES

- **DSP (Digital Signal Processing)** The IC-R75 is capable of AF-DSP with a factory installed DSP plug-in module. It offers noise reduction, and auto notch filter capabilities.
- **Coverage:** 0.03 - 60 MHz (0.1-29.99 and 50-54 MHz guaranteed)
- **Modes:** AM, S-AM, FM, USB, LSB, CW, RTTY
- **Triple conversion superheterodyne receiver**
- The IC-R75 sports cutting edge technology for today's serious DX'er, yet it is easy and affordable enough for casual listener use.
- **Get PC control of the IC-R75 with optional RS-R75 software on CD ROM.** Runs on Windows® 95; or Windows® 98 and comes with the necessary connection cable.
- **With its superior dynamic range of >104 dB, twin passband tuning (PBT) controls, and a large front mounted speaker, the IC-R75 offers unparalleled receive quality.**
- **Selectable RF gain/squelch control / Attenuator / 1 Hz tuning resolution / 2 level preamp / Selectable AGC / Three timer functions: sleep, power OFF, power ON / Noise blanker / Single touch controls / 12 V DC Power (120 V AC adapter included) / Voice synthesizer (optional)**

**Supplied Accessories:** AC adapter cable or DC power cable (depending on version), Spare fuse

### Suggested Accessories:

ANT08 - Par Shortwave Antenna .....	\$66.95
ANT15 - LF Engineering H-800 Skymatch Active Antenna ...	\$149.00
ANT27 - LF Engineering H-900 Gain Probe Antenna.....	\$189.00
SFT24 - ICOM RS-R75 Remote Control Software .....	\$64.95
SPK08 - ICOM SP-23 base speaker .....	\$184.95



**Order RCV32**  
**Only \$619.95**

## Grundig G3 Shortwave Portable



Measuring only 6-1/2" x 4", this PLL-stabilized, dual-conversion powerhouse covers AM broadcast through 30 MHz, and FM (stereo with included earphones!) with fine-tuned SSB reception as well! Store your favorite frequencies in 700 memory channels with alpha identification; use the digital clock with world zone settings for timing and alarm. Display is backlit for night viewing. Direct-entry keypad assures accurate frequency selection; tune continuously with the adjustment knob, or press the auto-search key to scan

or step manually. Includes AC adaptor for continual use or to recharge your NiMH batteries (not included); accepts AA alkalines as well! Handy, durable leatherette pouch included.

**Order RCV65**  
**Only \$149.95**

## Eton S350DL Deluxe SW Portable

This professionally-styled portable provides great reception at a rock-bottom price! Measuring 13" by 7" and sporting a gutsy 4" speaker, the superior audio is contoured by separate bass and treble controls. Output jacks are provided for line-level stereo output to your sound system. Frequency coverage of AM, FM and 3-28 MHz shortwave is accomplished by concentric fast-and-slow-tuning knobs. Sharp selectivity separates those closely-



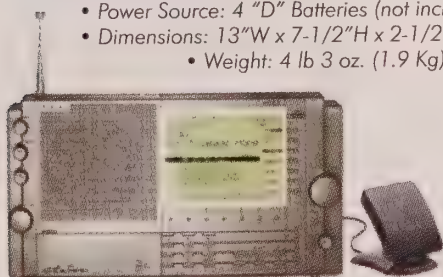
spaced stations! Powered by your choice of AA or D cells (and an AC wall adaptor is included), the S350DL sports a clock alarm, large backlit frequency display, telescoping whip, internal AM ferrite antenna, and external antenna connections for long-distance FM and SW reception.

**Order RCV04**  
**Only \$99.95**

## Eton E1XM

The finest port-a-top in the world, the E1XM offers powerful reception through its digitally synthesized PLL tuner with synchronous detector, passband tuning, and selectable bandwidth filters. Offering rich sound, the latest in radio technology, 1700 station presets, and memory scan function, the E1XM is designed without compromise, giving you direct access to news, sports, and music from around the world. XM Satellite service and pictured antenna sold separately

- **Power Source:** 4 "D" Batteries (not included); AC Adapter (included)
- **Dimensions:** 13"W x 7-1/2"H x 2-1/2"D (333 x 188 x 66 mm)
- **Weight:** 4 lb 3 oz. (1.9 Kg)



**Order RCV34**  
**Only \$499.95**

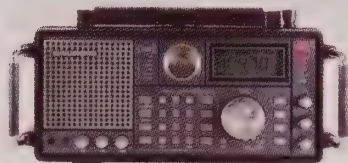
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fax: (828) 837-2216 email: [order@grove-ent.com](mailto:order@grove-ent.com) web: [www.grove-ent.com](http://www.grove-ent.com)  
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## Grundig Satellit 750

### AM/FM-Stereo/Shortwave/Aircraft Band Radio with SSB (Single Side Band)

When you want full shortwave capabilities and a classic design, choose the Satellit 750. A 360-degree rotating AM antenna enhances the radio's ability to pull in weak AM signals. You can listen to AM, FM, SW, LW, SSB and aircraft band frequencies, and you can program in up to 100 of your favorites for each band. You can also connect your MP3 player for even more listening choices. Hear what you want to hear.



**Order RCV58**  
**Only \$299.95**

## Sangean ATS909

### ...Arguably the best compact portable on the market!

Measuring only 8-1/2" wide and weighing less than two pounds, this dual-conversion, PLL-synthesized receiver stores more than 300 memory frequencies from 150 kHz-30 MHz and FM broadcast! Choose wide or narrow filters to optimize reception, and listen to stereo FM from the headphone jack! A recorder jack allows you to preserve important broadcasts. Digital clock/sleep/timer with alarm shows 42 world cities' times; signal strength indicator assists in tuning. AC or battery powered with battery level indicator for convenience or emergency.

Alphanumeric display aids station recognition, and you can accurately direct-enter frequencies via the keypad, or manually search with the rotary tuning dial. Fine-tune those SSB stations with 40 Hz precision, or let the 909's automatic search feature find the strongest shortwave stations for your listening pleasure! What more could you wish for in an affordable, high performance, world band receiver?



**Order RCV08**  
**Only \$239.95**

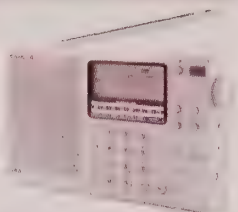
### Supplied Accessories:

AC Adaptor, manual, ANT60 portable reel antenna.

## Sangean ATS505P

Sangean's most recent ATS505P is a dual-conversion portable with continuous coverage from 150 kHz-30 MHz as well as 88-108 MHz FM (stereo with earbuds, included), with AM and USB/LSB reception, and even includes an AC power supply and reel antenna. 45 scannable memories allow automatic sampling of saved frequencies, while auto preset determines which signals are the strongest for reception. Frequencies may be entered directly with the keypad, or continuously adjusted with the tuning dial.

Illuminated display shows frequency, 12/24 hour time, adjustable sleep/timer offers gradually-increasing alarm level; entire panel may be locked out to prevent misadjustments.



**Order RCV07**  
**Only \$109.95**

### Supplied Accessories:

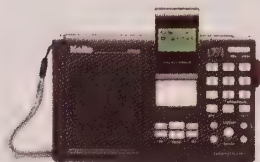
Carrying case, power supply, reel antenna and stereo ear buds.

## Kaito 1121

Single sideband and dual-conversion technology compares to the best portables on the market. Cutting-edge technology combines an MP3 recorder/player with a multiband receiver for 10 hours of high quality recording--hundreds of songs! Plug in any audio out and play on this amplified speaker for the device like iPod or MP3 players. All seven

NOAA weather channels are clearly receivable. Program station names and frequencies from a .txt file and load it into the radio's memory

A smart rechargeable system is included for rechargeable batteries which operate the radio and the MP3 device.

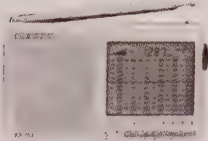


**Order RCV37**  
**Only \$149.95**

## Kaito KA-1103

Kaito's latest entry into the multiband portable market may look like an analog-dial radio, but it's actually a precision PLL circuit with 1 kHz steps and digital LCD readout! It tunes 76-108 MHz FM and also continuous 522-29900 kHz AM and shortwave—and it has infinite clarifying SSB as well!

This powerful, dual-conversion portable also has 190 memory channels (10 pages of 19) + 1 page for SSB to store your favorite stations, and runs off 4 Ni-MH AA rechargeable batteries (included) and AC; an automatic charger/adaptor is provided.



**Order RCV55**  
**Only \$89.95**

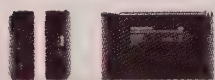
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fax: (828) 837-2216 email: [order@grove-ent.com](mailto:order@grove-ent.com) web: [www.grove-ent.com](http://www.grove-ent.com)

Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



## GRUNDIG G6 AVIATOR



AM/FM-stereo/Aircraft Band (117-137 MHz) and LW-Shortwave (150-29999 KHz) / Dual conversion / Digital tuning with digital frequency readout (LCD) / 700 memories with 4 character page naming / Full-featured world time zone: clock, sleep timer / Dimensions: 4.92" x 3" x 1.14" (W x H x D) / Weight: 7.3 oz., 207 g / **Accessories:** owner's manual, warranty card, AC adaptor, ear buds, protective pouch

**Order RCV59**  
**Only \$99.95**

## AOR SDU5600

The AOR SDU5600 is a compact LCD spectrum display unit for spotting and capturing brief transmissions within 10 MHz of the tuned frequency. Designed as a companion for the AR 5000+3 receiver, the SDU 5600 can also be used with any receiver with an IF output between 6-15 MHz. Functions include step size selection for direct channel sampling, and continuous spectrum mode (with choices of peak, max, average). On-screen support is provided for AR5000, AR5000+3, AR3000A, ICOM® IC-R7100, IC-R8500, IC-R9000 and "Others."

- High resolution 5 inch color TFT display  
Graphics are clear, crisp and sharp.
- Built-in "waterfall" display function
- FFT signal processing and analysis
- DSP
- Wide input level range: 0 ~ -90dBm
- High dynamic range: 60 dB



**Order TST10DS**  
**Only \$1,499.95**

Supplied with: DB-9 male control cable, BNC patch cable for IF connection, manual, 120V AC adaptor

## WIFI RADIO

Now you can listen to more than 16,000 streaming radio stations from around the world! Famous networks like the BBC and NPR; international shortwave stations; talk show and music broadcasters of every imaginable kind; even scanner traffic like police, fire and EMTs from metropolitan action centers! Simply plug any of these units into your Internet phone line, or invisibly join your wireless network from anywhere in your home or office—no computer needed.

## SANGEAN WFR-1 AND WFR-20 Wi-Fi INTERNET RADIO

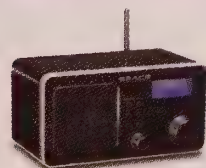
The Sangean WFR-1 offers the ultimate in Internet Radio listening. Load your favorite stations into memory; play your MP3 music files through its high-quality stereo system; listen to virtually every music mode from around the globe; monitor police communications, fire emergencies, even aircraft communications as more and more become available—all in clear, static-free sound!

- High Quality Full Range 3" Stereo Speakers in Acoustically Designed Wooden Cabinet
- Stereo Headphone Jack
- FM tuner with RDS (**RCV56 only**)
- Aux In/Line Out
- Remote Control
- 12.7 W x 4.2 H x 8.2 D, Weight: 6.4 lbs.

**RCV56 - \$349.95**  
**RCV40 - \$299.95 (No FM)**



## GRACE WIFI RADIOS



- Headphone Speaker Output: 15mW
- 9.75 (L) x 5.25 (D) x 5.75 (H) in. Weight: 4.59 lbs

**GDI-IR1000 - \$174.95**

All the fine features of the IR1000 plus full-function remote control, external audio input, stereo interconnect cable for your home stereo system.

**GDI-IR2000 - \$194.95**



- FM tuner
- Battery or AC power
- Wireless remote
- Headphone Speaker Output: MAX: 1mW
- 6.75(W) x 3.75(D) x 4(H) in. Weight: 2.2lbs

**GDI-IRP600 - \$194.95**



All the fine features of the IR2000 plus an iPod/iPhone dock and ethernet port. Modernistically styled; 11" wide.

**DS-IR3020 - \$239.95**

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Technical Questions? (828) 837-9200 or tech@grove-ent.com. Due to high call volume, technical calls will be limited to 3 minutes.



## WiNRADiO PC-based Receivers, G303 Series

The G303 Series receivers are low-cost, software-defined shortwave receivers for amateur and less-demanding professional applications.



This is an internal model, where the entire front end of a very sensitive software receiver (9kHz-30MHz) is contained on a PCI card, extremely well-shielded against the effects of PC-generated interference. The demodulation is performed by the PC using advanced digital signal processing techniques. Simple "Plug and Play" installation.

See also the optional G303 Professional demodulator and DRM decoder which further enhance the performance of this popular, award-winning receiver.

RCV46 WR G303i.....\$449.95  
RCV46P WR G303i (bundled w/professional demodulator).....\$549.95

The WiNRADiO WR-G303e is a software-defined PC-based HF receiver (9 kHz to 30 MHz). It represents an external version of the award-winning WR-G303i receiver, with equivalent performance.

The PC-based receiver is USB-controlled and compatible with modern desktop and laptop computers with USB interface. An optional serial interface is also available.



RCV46E WR G303e.....\$549.95  
RCV46EP WR G303e (bundled w/professional demodulator).....\$699.95

## WiNRADiO PC-based Receivers, G313 Series

The G313 Series receivers are professional, software-defined shortwave receivers, for demanding monitoring and surveillance applications.



This is an internal model, where the entire high-performance shortwave receiver (9kHz-30MHz) is contained on a PCI card, extremely well shielded against the effects of PC-generated interference. The demodulation is performed by an on-board DSP, which makes it possible to use multiple receivers in a single computer. Numerous functions and facilities include recording and playback (both audio and IF spectrum), IF shift, notch filter, noise blanker, and numerous test and measurements facilities including several spectrum analyzers. There are also numerous hardware options, factory-installed at the time of order. Simple

"Plug-and Play" installation.

RCV31 WRG313i.....\$949.95

The WiNRADiO WR-G313e is a software-defined high-performance HF receiver (9 kHz to 30 MHz, optionally extendable to 180 MHz) with a USB interface, an external version of the acclaimed WR-G313i receiver.

The receiver connects to an IBM-compatible PC via the USB port. Several receivers can be controlled by a single PC to form a multi-channel HF receiver system.

The receiver has its own on-board DSP, and does not rely on the PC sound card for its performance. As the DSP performs the final stage IF filtering and all demodulation, this receiver is entirely software-defined, which means that additional demodulation or decoding modes can be easily added by a mere software change.

RCV31E WRG313e.....\$1149.95



## Modifications

OPTIONS ARE FACTORY INSTALLED AND WILL TAKE 4-6 WEEKS FOR DELIVERY. To order a receiver with any of the options, simply add the option code(s) to the receiver model number.

For example, for a 180MHz receiver with external reference oscillator, the model number will be G313i/180/XR. Options can be mixed together (except the IF options where only one can be selected, i.e. IF1 and IF4 cannot be selected at the same time).

MOD04 - Frequency Extension Option (G313/180).....\$249.95  
MOD05 - External Reference Oscillator Option (G313/XR).....\$199.95  
MOD06 - Reference Oscillator Output Option (G313/RO).....\$149.95  
MOD07 - Intermediate Frequency Output Option 10.7 MHz (G313/IF1) \$249.95  
MOD08 - Intermediate Frequency Output Option 45 MHz (G313/IF4) \$199.95



## WiNRADiO G305 Series

**Convert your desktop PC into a most sophisticated radio monitoring station! The WiNRADiO WR-G305i is a software-defined PC-based wideband scanning receiver covering a frequency range from 9 kHz to 1800 MHz (optional down-converter to 3.5 GHz available).**

**G3**

The "G3" stands for "the third generation": As the original, award-winning, first-generation WiNRADiO WR-1000i receiver was the world's first commercially available wide-band receiver on a PC card when launched over a decade ago, the newly introduced WR-G305i is the world's first commercially available software-defined VHF/UHF receiver on a PCI bus card.

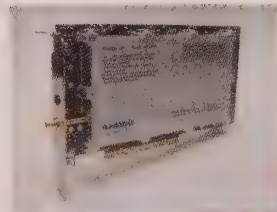
This Software Defined Radio (SDR) offers demodulation and last IF (intermediate frequency) processing entirely in software. Usually this means using a DSP, but in the case of the G305i, this processing is done on a personal computer using a sound card (most modern PCs are now faster and more powerful than many DSPs were only a few years ago). So, if you own a PC, the chances are that you already own an important part of a software defined radio receiver!

In addition to the flexible and friendly user interface, with its numerous functions and facilities not normally available on any conventional receiver, the WiNRADiO G305i receiver excels particularly by the ability of its demodulators.

While the Standard Demodulator provides performance of a highly respectable scanning receiver including synchronous AM demodulation and a real-time spectrum scope, the optional Professional Demodulator offers even more: continuous IF filter bandwidth adjustment (in 1 Hz increments), interactive block diagrams with two additional audio spectrum scopes, and even inbuilt THD and SINAD measurement capability.

### G305i

Frequency range from 9 kHz to 1800 MHz (except cellular bands where required by law), Software-defined demodulation, Extraordinary sensitivity, Tracking front-end filters, Excellent strong signal handling, Real-time spectrum analyzer, Spot-on tuning in 1 Hz steps, Accurate signal strength indicator, Fast scanning speed, Multiple squelch modes, Very low phase noise, DRM decoder option, Standard PCI interface, 3.5 GHz down-converter option, Plug and Play installation



RCV53 ..... \$519.95  
Government Agencies Order RCV53-G

### G305e

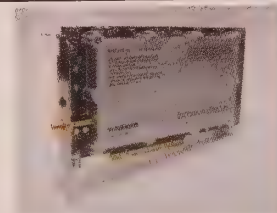
The G305e represents an external version of the WR-G305i receiver, with equivalent performance. The PC-based receiver is USB-controlled and compatible with modern desktop and laptop computers with USB interface.



RCV63 ..... \$619.95  
Government Agencies Order RCV63G

### G305i/PD

The amazing G305i with the Professional Demodulator. The many additional features include: Continuously variable IF bandwidth 100 Hz - 15 kHz, user adjustable filter selectivity, WiNRADiO Digital Bridge™ compatibility, built-in test and measurement instrumentation, interactive block diagrams with two additional audio spectrum scopes, and even inbuilt THD and SINAD measurement capability.



RCV53P ..... \$619.95  
Government Agencies Order RCV53P-G

### G305e/PD

The amazing G305e with the Professional Demodulator. The many additional features include: Continuously variable IF bandwidth 100 Hz - 15 kHz, user adjustable filter selectivity, WiNRADiO Digital Bridge™ compatibility, built-in test and measurement instrumentation, interactive block diagrams with two additional audio spectrum scopes, and THD and SINAD measurement capability.



RCV63P ..... \$719.95  
Government Agencies Order RCV63P-G

MOD09 – Wide FM option available for ALL G305 receivers.....\$99.95.

This option is factory installed and requires 4 – 6 weeks for delivery.

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Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



## WiNRADiO PC-based Receivers, G315 Series

This receiver is intended for government, military, security, surveillance, broadcast monitoring, industrial and demanding consumer applications.

G3



The WiNRADiO WR-G315i is a software-defined high-performance VHF/UHF receiver (9 kHz to 1800 MHz; extendable to 3500 MHz using an optional downconverter) on a PCI card.

The receiver offers an unparalleled flexibility given its SDR architecture, respectable dynamic range, and high sensitivity. Many useful features complement the receiver, making it capable of filling not only the role of a monitoring receiver but also that of a measuring receiver, such as the calibrated S-meter showing the received signal levels in dBm,  $\mu$ V or S-units, down to the -140

dBm noise floor, several spectrum analyzers, and many other features not usually found on receivers of this price.

The hardware and software package consists of the receiver card, Windows-based software, a start-up antenna and a user's manual.

RCV54 WR G315i..... \$CALL

RCV54-G WR G315i (government/professional version)..... \$CALL

The receiver connects to an IBM-compatible PC via the USB port. Several receivers can be controlled by a single PC to form a multi-channel HF receiver system.

The receiver has its own on-board DSP, and does not rely on the PC sound card for the signal input; the digitization is done in the receiver itself, using a high-performance analog-to-digital converter. As the DSP performs the final stage IF filtering and all demodulation, this receiver is entirely software-defined, which means that additional demodulation or decoding modes can be easily added by a mere software change.

(For example, an optional DRM decoder/demodulator is also available.)

Easily installed to any modern computer with the USB interface, this receiver represents an excellent mobile solution for VHF/UHF listening and monitoring.



RCV64 WR G315e..... \$CALL

RCV64-G WR G315e (government/professional version)..... \$CALL

## G3 Modifications

OPTIONS ARE FACTORY INSTALLED AND WILL TAKE 4-6 WEEKS FOR DELIVERY. To order a receiver with any of the options, simply add the option code(s) to the receiver model number. For example, for a 180MHz receiver with external reference oscillator, the model number will be G315i/180/XR. Options can be mixed together (except the IF options where only one can be selected, i.e. IF1 and IF4 cannot be selected at the same time).

MOD05 - External Reference Oscillator Option (G315/XR) .....	\$199.95
MOD06 - Reference Oscillator Output Option (G315/RO) .....	\$149.95
MOD07 - Intermediate Frequency Output Option 10.7 MHz (G315/IF1) .....	\$249.95
MOD09 - WR WFM Option .....	\$99.95
MOD10 - Intermediate Frequency 109.65 MHz Output Option (/IF0) .....	\$249.95
MOD11 - Intermediate Frequency 16 kHz Output Option (/IF2) .....	\$199.95

**Customer Comments:** "Thanks a bunch for asking for input! It's taken me a month to narrow down my interests. I started out with just about every category checked. :-) Keep up the GREAT work! It's exactly what I'm looking for in a resource. The .pdf format is excellent! It sure is easier to save & search stuff compared to the printed copy. Printed magazines quickly become a huge, unorganized stack of dusty paper in the garage. The .pdf format is always easy to find & reference past info.

73.

Kenneth K. K5KKG



Model No.	WR-G33EM	WR-G33WSM	WR-G315e	WR-G315i	WR-G305e	WR-305i	WR-G313e	WR-G313i	WR-G303e	WR-G303i
Stock Code	RCV16	RCV28	RCV64	RCV54	RCV53E	RCV53i	RCV31E	RCV31i	RCV46E	RCV46i
Description	Shortwave	VHF-UHF	Wideband	Wideband	Wideband	Wideband	Shortwave	Shortwave	Shortwave	Shortwave
Receiver Type	DDS-based dual-conversion superheterodyne with software-defined last IF stage and demodulator	DDS-based dual-conversion superheterodyne with software-defined last IF stage and demodulator	DSP-based SDR with DDS-based dual-conversion superheterodyne front end	DSP-based SDR with DDS-based dual-conversion superheterodyne front end	DDS-based dual-conversion	DDS-based dual-conversion	DDS-based double-conversion SDR	DDS-based double-conversion SDR	DDS-based double-conversion SDR	DDS-based double-conversion SDR
Construction	External USB	External USB	External USB	Internal PCI	External USB	Internal PCI card	External USB	Internal PCI card	External USB	Internal PCI card
Frequency Range	9 kHz - 30 MHz	30 to 1000 MHz	9 kHz - 1800 MHz	9 kHz - 1800 MHz	9 kHz-1800	9 kHz-1800	0.009-30 MHz	0.009-30 MHz	0.009-30 MHz	0.009-30 MHz
Modes	AM, LSB, USB, DSB, CW, DSC, NAVTEX, HF FAX, TELEX	FMN, FMM, FMW	AM, AMS, LSB, USB, DSB, ISB, CW, FM	AM, AMS, LSB, USB, DSB, ISB, CW, FM	AM, AMN, AMS, LSB, USB, CW, FMN	AM, AMN, AMS, LSB, USB, CW, FMN	AM, AMS, LSB, USB, DSB, ISB, FM	AM, AMS, LSB, USB, DSB, ISB, FM	AM, AMS, LSB, USB, FM (also DSB, ISB with Professional Demodulator option)	AM, AMS, LSB, USB, FM (also DSB, ISB with Professional Demodulator option)
Tuning Resolution	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz
Dynamic Range	93dB	93 dB	90 dB	90 dB	90 dB	90 dB	95 dB	95 dB	93 dB	93 dB
IF Bandwidths			1 - 15000 Hz (adjustable in 1 Hz steps)	1 - 15000 Hz (adjustable in 1 Hz steps)	Unspecified	Unspecified	1 Hz-15 kHz (cont variable w/1 Hz res)	1 Hz-15 kHz (cont variable w/1 Hz res)	0.5 kHz (CW); 2.5 kHz(SSB); 6 kHz(AM); 4 kHz(AMN); 4 kHz(AMS); 3, 6, 12 kHz (FM) (variable from 1 Hz to 15 kHz with Professional Demodulator)	0.5 kHz (CW); 2.5 kHz(SSB); 6 kHz(AM); 4 kHz(AMN); 4 kHz(AMS); 3, 6, 12 kHz (FM) (variable from 1 Hz to 15 kHz with Professional Demodulator)
IF Shift	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	±7.5 kHz	±7.5 kHz	-	-
Scanning Speed	N/A	N/A	50 channels/s	50 channels/sc	60 channels/s	60 channels/s	400 ch/sec w/1 kHz steps	400 ch/sec w/1 kHz steps	40 ch/sec	40 ch/sec
DSP			Yes	Yes	SDR	SDR	Yes	Yes	No	No
Spectrum Scope	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Audio Recording Playback	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No (software required)	No (software required)
Signal Strength Recorder	Yes	Yes	Yes	Yes	No	No	No	No	No	No

## WINRADIO Accessories

ACC02 - WR-USB USB ADAPTOR .....	\$49.95
ACC06 - WR-WTCI-B TELEPHONE CONTROL INTERFACE .....	\$950.00
ACC14B - CLIENT/SERVER OPTION FOR 3000 SERIES .....	\$399.00
ACC14C - CLIENT/SERVER OPTION FOR 1000/1500 SERIES .....	\$99.00
ACC14D - CLIENT/SERVER OPTION FOR G313 SERIES .....	\$149.95
ACC28 - WR-PCA PCMCIA OPTION .....	\$89.95
ACC37 - WR-MAC-SC-01 MACINTOSH SERIAL CABLE .....	\$17.95
ACC71 - WR-AC-MC-01 MOUNTING CLAMPS .....	\$14.95
ADP35 - WR-LWA-0130 LONG-WIRE ANTENNA ADAPTOR .....	\$39.95
BRK02 - WR-G3E-WMB WALL-MOUNT BRACKET FOR G3 SERIES .....	\$19.95
CBL03 - WR-RCA-03 CABLE FOR 1500/3000 RECEIVER "DATA PORT" .....	\$9.95
CVR02 - WR-DNC-3500 FREQUENCY DOWNCONVERTER .....	\$189.95
DEC01 - WR-UNIFSK DECODER .....	\$349.95
PRE03 - WR-LNA-3500 LOW NOISE AMPLIFIER .....	\$199.95
PWR05 - WR-PPS PORTABLE POWER SOURCE for External 1000/1500/3000 .....	\$189.95
PWR09 - G3 Portable Power Source Option .....	\$189.95
SFT15 - DIGITAL SUITE .....	\$85.00
SFT15A - ADVANCED DIGITAL SUITE .....	\$179.95
SFT15U - DIGITAL SUITE UPGRADE .....	\$85.00
SFT16 - WORLDSTATION DATABASE MANAGER (VERSION 2) .....	\$85.00
SFT20 - G303 PROFESSIONAL DEMODULATOR .....	\$179.95
SFT23 - TRUNKING OPTION .....	\$89.95
SFT33 - WR-WTCInet SOFTWARE .....	\$499.00
SFT40 - G305 PROFESSIONAL DEMODULATOR .....	\$199.95
SFT42 - APCO P25 Decoder for G305 Receivers .....	\$89.95
SFT47 - APCO P25 Decoder for G315 Receivers .....	\$179.95
TST06 - ERD-1500 ELECTROMAGNETIC RADIATION DETECTOR .....	\$49.95

## WINRADIO PROFESSIONAL PRODUCTS

Check out our professional website for  
government/military receivers and antennas!

<http://www.grove-ent.com/professional.html>

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Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



# SCANNER SPEC CHART

Scanner	Alinco DJ-X3	ALINCO DJ-X7	Alinco DJX-2000T	AOR 8200 MKIII-B	ICOM R-5 SPORT	ICOM R-20
Grove Order	SCN 11	SCN 3	SCN 10	SCN 51	SCN 2	SCN 20
Frequency Range	0.1-1300 MHz	0.100 - 1299.995MHz (less cell)	0.1000 - 2,149.999950MHz	500KHz-2040MHz (less cell)	0.150-823.995, 849.000-868.995, 894.000-1309.995	0.150-821.999, 851.000-866.999, 896.000-1304.999, 1305.000-3304.999
Keypad Entry?	No	No	Yes	Yes	No	Yes
Tuning Steps	11	Auto; 5Hz-200kHz Selectable	Auto, 50Hz -KHz, user-programmable	Program Multiples 50 Hz all modes	5kHz-100kHz Selectable	0.1kHz-100kHz Selectable
Display	LCD	LCD	LCD	LCD; Alpha-Numeric	LCD Backlight w/Timer; Alpha- Numeric	Backlit dot-matrix LCD
Dimmer	No	On/Off Option	On/Off	On/Off	No	Auto 5 sec; On/Off
Receiving Modes	WFM, WFM/stereo, NFM, AM	AM, FM, WFM	NFM/WFM (mono, stereo)/AM/CW/USB/ LSB	WFM, NFM, SFM, WAM, AM, NAM, USB, LSB, CW	AM/FM/WFM; Prepro TV & Shortwave.	SSB/CW/AM/FM/WFM
Memory Channels	700	1000	2000	1000	1250	1250
Scan	20 Steps Sec	20 Chan Sec	20 Steps Sec	Max 50 Steps Sec	7 Scan Types with priority watch, Programmed: 16.7 channels/sec. Memory: 6.25 channels/sec.	Multiple scan functions:100Ch/sec high speed scan capability
Banks	10	50	50	20	18	26
Channel Lockout	Yes	Yes	Yes	Yes	No	Yes
Priority	8	2	1	1	3 Types	Yes
Search	Yes	No	Yes	Max 37.42 Steps Sec; 40 Banks	Yes	6 Types
Delay	Unspecified	5 Sec	Yes	Selectable	2-20 Sec	Yes
Clock	No	Off Timer	No	Sleep Timer	No; Power Save; Power Off	Auto Power Off Timer
Record Audio Output	No	No	Yes	Optional Accessory	No	IC recorder of up to 32 tracks. Max record length about 260 min
Spk/Hdp Jack	Yes	Yes	Yes	Yes	Yes	Yes
Signal Strength Ind	Yes	Yes	Yes	Band Scope	LCD Bargraph	Yes
Computer Interface	Yes	Yes	Yes	Control, Clone	PC Data, Clone	PC Data, Clone
Conversion Scheme	TRIPLE	Triple NFM/AM; Double FM	Triple	Triple	Triple	Triple
Selectable Attn	Unspecified	Yes	Yes	Yes	Yes	Yes
Antenna Connector	SMA	SMA	BNC	BNC	SMA	BNC
Dimensions (WxHxD)	56 X 102 X 23 mm	2.2 x 3.7 x 0.57 in	57 x 150 x 27.5 mm	2.4 x 5.6 x 1.5 in	2932 x 338 x 11/16 in	2 3/8 X 5 19/32 X 1 3/8 in
Weight	145G	3.63 oz antenna/battery inclusive	200 G	12 oz	6.5 oz	11.3 oz (with the ant. and BP-206)
Power Requirements	4 AA cells	DC3.7V (external DC port DC3.7V-6.0V)	Ni-Cd battery pack, DC 6V with EDH-16 AA battery case, DC 10-16V external power source.	4 x AA; 12VDC	2 x AA (R6) Ni-Cd or Alkaline Cells; 6.0V DC $\pm$ 5%	3 AA cells, BP-206 Li- ion battery pack (with AC adaptor, BC-149A/D or CP-18A/E)
Accessories	Dry-cell case; manual, antenna	Instruction manual, Li- ion Battery pack EBP- 58N (3.7V 600mAh); Adaptor EDC-126 (120V) or EDC-128 (220V) 6.0V 0.5A; SMA whip antenna; Antenna cap; Curl-cable earphone	Antenna, Belt Clip, Carry Strap, Manual, Ni-Cad battery Pack, AC Power	Whip Antenna, MW Bar Aerial, 4 AA NiCad Batteries, AC Charger, Cigarette Adaptor, Hand Strap, Belt Clip, Manual	Handstrap, Antenna, Belt Clip, Manual	Telescoping Antenna (FA-B04RE), Belt clip (MB-98), Battery spacer, Hand strap, Battery pack* (BP-206), AC adaptor*(BC- 149A/D) (The shape of the BC-149A and BC- 149D are different.)

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# SCANNER SPEC CHART

Scanner	UNIDEN BC-346XT	UNIDEN BCD-996XT	UNIDEN BCD396XT	UNIDEN BCT-8
Grove Order	SCN 45	SCN 21	SCN 53	SCN 8
Frequency Range	25.0000 - 224.9800; 400.0000 - 512.0000; 806.0000 - 823.9875; 849.0125 - 868.9875; 894.0125 - 960.0000; 1240.0000 - 1300.0000 MHz	25.0000-512.0000; 758.0000- 823.9875; 849.0125-868.9875; 894.0125-960.0000; 1240.0000- 1300.0000 MHz	25.0000 - 512.0000; 763.0000 - 775.9875; 793.0000 - 823.9875; 849.0125 - 868.9875; 894.0125 - 960.0000; 1240.0000 - 1300.0000 MHz	25-54; 108-174; 400-512; 806-956 MHz (less cell)
Keypad Entry?	Yes	Yes	Yes	Yes
Tuning Steps	5, 10, 12.5, 25 kHz	5-100 kHz Auto	5-12.5 khz Auto	5, 12.5 kHz
Display	Backlit LCD	Backlit LCD	Backlit LCD	Backlit LCD
Dimmer	Selectable	User Prog & 2 Color Backlight	10, 30, Squelch	No
Receiving Modes	AM, WFM, NFM, Trunked at 3600 & 9600 Baud; Mixed Mode: Motorola Type I, II VHF, II UHF, Type II 800 MHz, Type II 900 MHz, Ericsson/M/A Com EDACS Wide, Narrow, SCAT, EF Johnson LTR	TrunkTracker IV with Control- Channel Only scanning and I-Call monitoring: Tracks voice traffic on P25, Motorola, EDACS, and LTR Trunked systems, Supports scanning of Rebanded systems, APCO25 Digital Audio decoding, Support for P25 Conventional channels that include NAC and TGID user differentiation (P25 One-Frequency Trunk), Adaptive Digital Threshold - Automatically sets the digital decode threshold for APCO 25 systems, EDACS ESK support	Motorola Type I, Type II, Type II Hybrid, Type II Smartnet, Type II Smartzone, Type II Smartzone Omnilink, Type II VOC, EDACS Standard (Wide), Standard Networked, Narrowband (Narrow), Narrowband Networked, SCAT; ESK (not ProVoice), LTR Standard, Project 25 Standard, System Voices: Analog; APCO-25 Common Air Interface, APCO-25 Common Air Interface Exclusive	9 Pre-programmed, NOAA/Canada; 13 bands, aircraft, MHz Motorola Type II 800 MHz; Motorola Type II VHF 136-174 MHz; Motorola Type II UHF 406-512 MHz; Motorola Type I and Hybrid; EDACS® Wide Band: 9600 band; EDACD Scat
Memory Channels	3300+	Channels: 25,000 maximum; Systems: 500 maximum; Groups per system: 20 maximum; Talkgroups per trunked system: 500 maximum; Channels per conventional system: 1000 maximum; Preprogrammed Service Search Bands 12	Dynamic Allocation Capacity (with Name Assigned To Each System, Group, and Channel); Systems: 200 max Groups: 20 per system Channels: up to 2500 Channels per Trunked System: up to 200	250
Scan	100 Ch Sec conventional mode	100 CH/Sec. in Scan Mode (max)	100 Ch Sec Conventional	100 CH Second Conventional
Banks	Dynamic Memory Management	Dynamic Allocation	Dynamic Allocation	5
Channel Lockout	Yes	200	Yes	Yes
Priority	Yes	Scan & Plus	Yes	5
Search	300 Stp Sec 5 kHz step only	100 St Sec; 300 Steps/Sec. Search Mode; Turbo 5 kHz step	300 steps per second (5 kHz step only)	100 Stp Sec Normal ; 300 Stp Sec Turbo
Delay	2 Sec	1-5 Sec; Off	0-5 Sec	Yes
Clock	No	No	No	No
Record Audio Output	No	REC. Out Jack 3.5mm (1/8-in.) Stereo Type	No	No
Spk/Hdp Jack	Yes	3.5mm (1/8-in.) Stereo Type; 3.5mm (1/8-in.) Monaural Type	Ext. Speaker Jack 3.5mm	Yes
Signal Strength Ind	Unknown	Yes	Yes	No
Computer Interface	PC	4pin Mini Type	4pin Mini Type	Jack (DB-9)
Conversion Scheme	Triple	Triple	Triple	Triple
Selectable Attn	Yes	Yes	Yes	No
Antenna Connector	BNC	BNC	SMA	BNC
Dimensions (WxHxD)	2.72 x 1.26 x 4.6 in	7.2 x 5.9 x 2.2 in	2.72 x 1.26 x 4.6 in	7.06 x 6.10 x 2.44 in
Weight	0.48 lbs	3.46 lbs	0.48 lbs	38.8 oz
Power Requirements	2 AA Alkaline Batteries (3V DC), or 2 AA Rechargeable Ni-MH Batteries (2.4V DC), or AC Adapter (6 VDC 500mA) (AD-0008)	DC 11.0V to 16.6V AC Adapter (AD-1009) or Cigarette Lighter Cord or DC Cord with Orange Wire	2 AA Alkaline Batteries (3V DC), or 2 AA Rechargeable Ni-MH Batteries (2.4V DC), or AC Adapter (6 VDC 500mA) (AD-0008)	12V DC, 500mA Supplied
Accessories	RS-232 PC Cable, Wrist Strap, AC Charger/Power Supply, 2 AA Ni-Cads, Belt Clip, Antenna, Manual, Frequency Guide.	AC Adapter, Cigarette Lighter Adapter Power Cord, Three wire DC Power Cord, ISO-DIN Mounting Bracket and Hardware, DIN-E Sleeve and Removal Keys for vehicle installation, Push-on type telescopic antenna, Remote PC to Scanner Cable (scanner plug to front PC connector), Owners Manual (148 pages)	PC Cable, 3 "AA" Batteries, Wrist Strap, AC Adapter, Swivel Belt Clip, Antenna, SMA-BNC Antenna Adaptor, Manual	AD 140U-AC Adapter, DC Power Cord, CD007 Cigarette Lighter Adapter Plug, Telescopic Antenna, Window Mount Antenna, Operating Guide, Trunk Tracker Frequency Guide, BCT 8 Software V 1.0 (OS W98SE, ME, 2000, XP)



# SCANNER SPEC CHART

Scanner	GRE PSR-200	GRE PSR-300	GRE PSR-400	GRE PSR-500	GRE PSR-600	Yaesu VR-500
Grove Order	SCN 17	SCN 13	SCN 14	SCN 18	NA	SCN06
Frequency Range	29-54; 108-135; 137-143; 144-174; 380-512 MHz	25-54; 108-136; 137-174; 216-299; 300-512; 764-960; 1240-1300 MHz	25-54; 108-136; 137-174; 216-299; 300-512; 764-960; 1240-1300 MHz	25-54; 108-174; 216-512; 764-960; 1240-1300MHz	25-54; 108-174; 216-512; 764-960; 1240-1300MHz	100 kHz to 1299.99995 MHz
Keypad Entry?	YES	YES	YES	YES	Yes	Yes
Tuning Steps	5K, 12.5K	3.125, 5, 6.25, 7.5, 8.33, 10, 12.5, 25 kHz	3.125, 5, 6.25, 7.5, 8.33, 10, 12.5, 25 kHz	11 TUNING STEPS	11 Tuning Steps	0.05/0.1/5/6.25/9/10/12.5/15/20/25/30/50/100 kHz
Display	LCD	LCD 16-Character, 4-Line Alphanumeric Display	LCD 16-Character, 4-Line Alphanumeric Display	LCD	LCD	LCD
Dimmer	NO	NO	NO	YES	YES	Yes
Receiving Modes	AM, FM, UHF, VHF	Multi trunking of Motorola (type I, II and hybrid analog system), EDACS wide and LTR; VHF; UHF; SAME/FIPS Weather Alert	Multi trunking of Motorola (type I, II and hybrid analog system), EDACS wide and LTR; VHF; UHF; SAME/FIPS Weather Alert	Motorola, EDACS Standard, EDACS Narrow, LTR, P25, VHF, UHF	Motorola, EDACS Standard, EDACS Narrow, LTR, P25, VHF, UHF	NFM/WFM/AM/USB/L SB/CW
Memory Channels	200; 5 Pre-programmed	1500 ID memory in 10 ID banks, 5 sub-ID memories in each bank, and each sub-ID memory has 30 ID locations.	1000	Over 1800	Over 1800	1000
Scan		60 Ch sec	60 Ch sec	55 Ch sec	55 Ch sec	Yes
Banks		10	10	Free form memory	Free form memory	10
Channel Lockout	YES	YES	YES	Yes	Yes	Yes
Priority		1	1	1 Yes	Yes	1
Search	80 steps sec	78 steps sec	78 steps sec	90 steps sec	90 steps sec	24 Ch Sec
Delay	Yes	2 SEC	2 SEC	Yes	Yes	Yes
Clock	No	NO	NO	No	No	NFM/WFM/AM/USB/L SB/CW
Record Audio Output	No	NO	NO	No	No	NFM/WFM/AM/USB/L SB/CW
Spk/Hdp Jack	Yes	YES	YES	Yes	Yes	Yes
Signal Strength Ind	Unspecified	YES	YES	Real Time; Spectrum Sweep	Real Time; Spectrum Sweep	Yes
Computer Interface	Yes	YES	YES	Yes	Yes	NO
Conversion Scheme	Double	TRIPLE	TRIPLE	Triple	Triple	Triple
Selectable Attn	YES	YES	YES	Yes	Yes	Yes
Antenna Connector	BNC	BNC	BNC	BNC	BNC	BNC
Dimensions (WxHxD)	8.26 x 6.88 x 2.36 in	65 x 42 x 145 mm	2 1/4 x 7 1/4 x 5 5/16 Inches	2.55 x 1.65 x 5.70 in	7.28 x 5.31 x 2.16 in	2.3(W) x 3.7(H) x 0.9(D) in
Weight	24.692 oz	240 g	27.7 oz	Unspecified	Unspecified	220G
Power Requirements	AC Adaptor	4 AA Cells; AC Power	AC adapter, and DC cable	4 AA Cells; Ac Adaptor	AC Adaptor; DC cable	2.2 ~ 3.5 VDC (nominal 3V)
Accessories	Telescoping antenna, AC Adapter, owners manual	Flexible Antenna; Rechargeable & Non-Rechargeable Battery Pack; AC Adaptor; Be;t Clip	Telescopic antenna, Owner's manual, Bracket, AC adapter, and DC cable	Rubber duck antenna, owners manual, normal battery holder, rechargeable battery holder, belt clip, and USB PC interface cable	Telescoping antenna, owners manual, mounting bracket, AC adapter, DC cable (with fuse), and USB PC interface cable.	NiCd battery, AC wall charger.



# RECEIVER SPEC CHART

RECEIVER	AOR 5000A+3B	AOR 8600 MK II	AOR SR-2000A	ICOM R-75	SANGEAN ATS-505P	SANGEAN ATS-909
Grove Order	RCV 44P	RCV11	RCV36	RCV32	RCV07	RCV 8
Frequency Range	10kHz ~ 3000MHz	100kHz - 3000 MHz	25 ~ 3,000 MHz	0.03-60.0000 MHz	150 kHz-30 MHz; 88-108 MHz FM	150 kHz-30 MHz; 88-108 MHz FM
Keypad Entry?	Yes	Yes, Tuning Dial	Yes, Tuning Dial	Yes	Yes, Tuning Dial	Yes, Tuning Dial
Tuning Steps	NCO 1Hz-999.999999kHz	Prog multiples 50 Hz	Unspecified	1HZ	9/10 kHz Switch	40Hz-100kHz
Display	Multi-function LCD w/7 character alpha-text	Backlit LCD, Alpha-Numeric	5 inches TFT color LCD	Backlit LCD	Backlit LCD	Backlit LCD
Dimmer	Yes	Yes	No	Yes	No	No
Receiving Modes	AM, AM Synch, NFM, WFM, USB, LSB/CW	WFM, NFM, SFM, WAM, AM, NAM, USB, LSB, CW	AM/NFM/WFM/SFM	USB, LSB, CW, RTTY, AM, S-AM, FM	AM, FM, USB, LSB	AM, FM, USB, LSB
Memory Channels	2000	1000	1000	101	45	306
Scan	45 Ch Sec	37 inc sec max		5 Scan Modes	Yes	Yes
Search	45 St Sec	37 inc sec max	40 Ch Sec	Yes	Yes	Yes
Delay	Programmable	Yes	Unspecified	Fixed	No	No
Clock	Sleep Timer, Alarm	Sleep Timer	No	3 Timer Functions, Dual	12/24 Hour, Adjustable Sleep Timer	42 World City Times; 3 Timers; Adj Sleep Timer; Dual Time
Audio output (typical)	1.7 watts into 8 ohms (@ 13.5V) @ 10% dis	800mW (8 OHMS) MAX @ 10% THD	1.2watts (@8 ohm) 10% THD	More than 2.0W @10% distortion w/8 load	Unspecified	1W or more
Record Audio Output	Yes	Yes		Yes	No	Yes
Recorder Activator	Yes	Optional Slot Card		Yes	No	Yes
Signal Strength Ind	Analog S-Meter	Bargraph		Bargraph	No	Bargraph
Computer Interface	RS232	RS232	RS-232C & USB interface	RS232	No	No
Conversion Scheme	Triple	Triple	Triple	Triple	Unspecified	Unspecified
Sensitivity (Typical)	0.6uV	N/A		SQL sensitivity (threshold): SSB, CW, RTTY: Less than 5.6 µV (Preamp 1 ON) FM: Less than 0.32 µV (Preamp 2 ON)	Unspecified	0.5uV
Selectable Attn	Yes	Yes		Yes	No	No
IF Selectivity	Unspecified	SSB/NAM 3kHz (-6dB), 9kHz (-60dB) AM/SFM 9kHz (-6dB), 20kHz (-40dB) WAM/NFM 12kHz(-6dB), 25kHz (-40dB) WFM 150kHz(-3dB), 380kHz (-20dB)		SSB, CW, RTTY: More than 2.1 kHz/-6dB, Less than 4.0 kHz/-60dB AM, S-AM: More than 6 kHz/-6dB, Less than 20 kHz/-60dB FM: More than 12 kHz/-6dB, Less than 30 kHz/-60dB	Unspecified	Unspecified
Passband Tuning	Low Pass/High Pass Filters	No	No	Yes, Twin	No	No
Antenna Connector	N, SO239	BNC	BNC	SO239, Springload	1/8" Mini Plug	1/8" Mini Plug
Dimensions (WxHxD)	8.5 x 4 x 10 1/4	6.1 x 0.19 x 7.6 in	8.7 x 4.7 x 7.7 in	9.5 x 3.7 x 9.1in	Unspecified	8 1/4 x 5 x 1.5
Weight	7.5 lbs	4.409 lbs	7.4 lbs	6 lbs 10 oz	Unspecified	30 oz
Power Requirements	12-16 VDC @ 1.5 A max.; AC adaptor included	120 VAC supplied	12 ~ 16V DC @ 1.4 amps (at 1watt audio output)	13.8 V DC ±15% (negative ground)	4 AA or 12 VDC Supplied	4 AA or 12 VDC Supplied
Accessories Included	Power Supply, Manual	Telescopic Whip, MW Bar, Manual, Power Supply	DC Cord, Manual	AC Power, Manual, Fuses	Case, Stereo Ear Buds, Reel Antenna, Power Supply	Manual, AC Power Supply, Reel Antenna, Case



# RECEIVER SPEC CHART

RECEIVER	ETON S350DL	ETON 750 Multiband Radio	ETON E1XM	Grundig G3 Globe Traveler	GRUNDIG G6	KAITO 1103	KAITO 1121
Grove Order	RCV04	RCV58	RCV34	RCV65	RCV59	RCV 55	RCV37
Frequency Range	AM 530-1710 KHz; FM 88-108 MHz; SW 3-28 MHz	118-137MHz; 1711-30000 KHz	100-30,000KHz; 76-90, 87-108MHz	150-30000KHz, 118-137MHz	117-137 MHz, 150-29999 KHz	76-108MHz, 522-29900kHz	140 kHz -520 kHz; 520 kHz- 1710 kHz; 70 MHz- 88.0 MHz; 88.00MHz - 108 MHz; 3000 kHz - 29,999 kHz
Keypad Entry?	No, Tuning knob	Yes, Tuning Dial	variable-rate tuning knob, direct keypad frequency entry, up/down pushbuttons and auto-tuning	Yes, Tuning Dial	Direct keypad entry tuning system	NO	Keypad, Dial
Tuning Steps	Unspecified	Unspecified	Unspecified	Unspecified	Set 9/10 KHz AM tuning; set FM tuning range	1K	1K
Display	Backlit LCD	Backlit LCD	Backlit LCD	Backlit LCD	Backlit LCD	LCD	LCD
Dimmer	On/Off		Unspecified	Unspecified	Unspecified	3 MODES	NO
Receiving Modes	AM, FM, SW	AM, FM, Aircraft Band; SW	AM, FMS, SSB, CW	AM/LW/FMS, SWw/ SSB, VHF Air	AM/FMS/Aircraft Band; LW-Sw	SSB, AM, FM	SSB, AM, FM
Memory Channels	No	1000	500	700	700	190	100 pages with 400 Memories
Scan	No	No	No	No	Yes	No	NO
Search	No	No	No	No	No	No	NO
Delay	No	No	No	No	No	No	NO
Clock	Digital 12-24 Hr; Wake/Sleep Timer	No	Dual Programmable Clocks With WWV Auto-Setting	Clock, sleep timer, alarm function	Clock, Sleep Timer, 3 Timers	Beeper, radio and sleep clock/alarm	3 Alarms
Audio output (typical)	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	
Record Audio Output	Line Out	Line in/out socket	Line in/out	Line in/out	Line Out	No	NO
Recorder Activator	No	No	No	No	No	No	NO
Signal Strength Ind	Yes	No	Yes	Yes	Yes	LCD Bargraph	YES
Computer Interface	No	No	No	No	No	No	NO
Conversion Scheme	Unspecified	Dual & SSB	Dual	Dual	Dual	Dual	DUAL
Sensitivity (Typical)	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	N/A	N/A
Selectable Attn	No	No	No	No	No	N/A	N/A
IF Selectivity	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	N/A	Unspecified
Passband Tuning	No	No	No	No	No	No	No
Antenna Connector	1/8" Mini Plug	BNC & Springclip	Yes	1/8" Mini Plug	1/8" Mini Plug	1/8" MINI	1/8" mini
Dimensions (WxHxD)	12-1/2 x 7 x 3-1/2	14.65 x 7.24 x 5.75	13"W x 7-1/2"H x 2-1/2"D	6.614 x 4.13 x 1.1	4.92 x 3 x 1.14	6.5 x 4 x 1	6.5 x 3.75 x 1.25
Weight	3 lb. 4 oz	5.25 lbs	4 lb 3 oz.	345 g	7.3 oz	Unspecified	14 oz
Power Requirements	4 D or AA Batteries (not included) or AC Adaptor (included)	AC/DC-6V power supply	4 "D" Batteries (not included); AC Adaptor (included)	4 x 1.5 V (LR6, AM3, AA); 4 AA rechargeable Ni-MH	2 AA batteries (not included); 2 AA rechargeable Ni-MH batteries (not included); AC adaptor (included).	4 Ni-MH AA; ac Adaptor	3 AA; AC Adaptor
Accessories Included	Manual, AC Power	owner's manual, warranty card		owner's manual, warranty card, protective pouch, AC adapter/charger	owner's manual, warranty card, AC adaptor, ear buds, protective pouch	Manual, AC Power, Rechargeable Batteries, Earphone, Wire Antenna, Carry Case	Carrying pouch, AC Adaptor, 3 AA rechargeable batteries & DF6 Ni-MH rechargeable battery for MP3 player, Stereo Earphone, USB cable, Installation CD, Wire Antenna, Manual, Quick Reference Guide.



# PC-Based SPEC CHART

Model No.	PERSEUS	ICOM R-1500	ICOM R-2500
Frequency Range	10KHz - 30MHz	0.010-3299.99MHz	0.010-3299.99MHz
Modes	SSB, CW, AM, FMND, ETC., Software Defined	AM,FM,WFM,USB,LSB,CW	AM,FM,WFM,USB,LSB,CW
Sensitivity	0.39 uV SSB (S+N)/N= 10 dB		
Selectivity	Software Defined (>100 dB Stop Band)		
Image Rejection	90 dB		
Input IP3	31 dBm		
Dynamic Range	103 dB (SSB, 2.4K BW); 107 dB (CW, 500 Hz BW)		
Memory Channel	Unspecified	2700	2700
Bandscope	Yes	2 Types	2 Types
Scan	Unspecified	60 ch sec	60 ch sec
Recorder Functions	Yes	Yes	Yes
Audio Output Typical	Unspecified	More than 500 mW @ 10% distortion w/8Ω load	More than 500 mW @ 10% distortion w/8Ω load
Recorder Functions	Yes	Yes	Yes
Signal Strength Indicator	Yes	Yes	Yes
Conversion Scheme	Triple	Triple	Triple
Antenna Connector	BNC	BNC	BNC
Dimensions	4-1/4 x 1-1/2 x 7-1/4	53.4x15.8x81.8 in	53.4x15.8x81.8 in
Weight	13 oz	2 lb 10 oz	3 lb
Power Requirements	110/240V +5Vdc	12.0 V DC ±15%	12.0 V DC ±15%
Accessories Included	universal 120/240 VAC 50/60 wall adaptor	AD-113A AC Power, Antenna, USB Cable,Software/Driver CD, Foot Pad Sheet, Cable Hanger, Remote Controller Head	AD-113A AC Power, Antenna, USB Cable,Software/Driver CD, Foot Pad Sheet, Cable Hanger, Remote Controller Head

View COMPLETE details for each radio on our website at:

**www.grove-ent.com**

**The Most Advanced, wide-frequency-coverage receivers ever produced.**

**Icom R9500**



**AOR SR2000A**



**AOR Alpha**



**WinRADIO MS8118**



For a complete listing of receiving products from these and other manufacturers, be sure to visit our award-winning website:

**Online NOW at www.grove-ent.com**

We recently surveyed our Monitoring Times readers about what they liked about the magazine, and what they believed we could do to improve it. Here are a few of the responses:

*"Your magazine is fantastic now. Don't know how you can improve it." -Brad L., Springfield, MO*

*"MT Express is a GREAT resource for me! I look forward to it every month! Thanks." 73. Kenneth K., K5KGK, Austin, TX*



# Designed for the track...

## IC-RX7 Stylish Scanner with Smart Interface

Sleek, fast, and able to hit the track even during a rain storm! Icom's smart user-interface allows you to zip around the track and frequencies, qualifying you for pole position with Li-ion battery performance that will have your friends hitting the pits way before you.

### Features:

- 0.150 - 1300.000 MHz\*
- AM, FM, WFM
- 1650 Alphanumeric Memory Channels
- High Speed Scan and Search
- Computer Programmable (Optional CS-RX7)
- IPX4 Water Resistance

*...and good for everyday use.*

### IC-R5 SPORT

#### COMPACT WIDE BAND

- 0.5 - 1300.0 MHz\*
- AM, FM, WFM
- 1250 Memory Channels

### IC-R20

#### ADVANCED WIDE BAND

- 0.150 - 3304.0 MHz\*
- AM, FM, WFM, SSB, CW
- 1000 Memory Channels

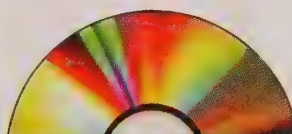
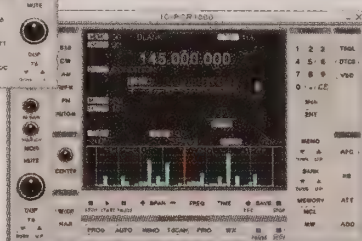
\*Frequency coverage may vary. Refer to owner's manual for exact specifications.  
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**ICOM®**



# Icom "Black Box" Receivers

*All Icom "black box" mobiles come bundled with Icom and Bonito's RadioCom 4.5 software!*



It all starts with a little black box. Plug in the remote head or install the computer-control software on your PC and run your receiver using Windows®. Either way, you're in for a lot of listening enjoyment.



## IC-R1500

### Mobile or PC Control

- 0.01 - 3299.99 MHz\*
- AM, FM, WFM, USB, LSB, CW
- 1000 Memory Channels
- Fast Scan
- Optional DSP (UT-106)
- Bonito Software Included
- Very Compact Design



## IC-R2500

### 2 Wide Band RX in 1

- 0.01 - 3299.99 MHz\*
- AM, FM, WFM, SSB, CW (Main)
- AM, FM and WFM (Sub)
- 1000 Memory Channels
- Optional D-STAR (UT-118)
- Optional P25 (UT-122)
- Optional DSP (UT-106)

### For free literature:

425.450.6088 or

[www.icomamerica.com](http://www.icomamerica.com)

\*Frequency coverage may vary. Refer to owner's manual for exact specifications.

\*\*Blocked versions only. Limited time offer. See dealer for details.

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# ICOM®



# IC-R9500 Icom's Ultimate Wide Band Receiver

We've raised the bar with our super performance, multiple function wide band "measuring" receiver. The IC-R9500 has normal and wide spectrum scope functions. With five roofing filters before the first amp, two independent 32 bit floating point DSP processors, and 7-inch wide color TFT LCD, this is a do-it-all radio to get excited about!

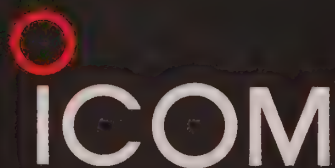


## Features:

- 0.005 - 3335.000 MHz\*
- USB, LSB, CW, FSK, FM, WFM, AM
- 1020 Alphanumeric Memories
- P25 (Option UT-122)
- Five Roofing Filters
- Dual DSP
- Digital IF Filter
- Multi-function Spectrum Scope

- 7-inch TFT LCD Display
- Noise Blanker
- Noise Reduction
- Multi-scan Functions
- Voice Synthesizer
- Digital Voice Recorder
- USB Connector
- Receive Assist Functions

\*Frequency coverage may vary. Refer to owner's manual for exact specifications.  
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**Icom Bases - Receive at home or on the job!**



## IC-R75

### Low Noise Floor, Medium Size, and High Value!

Discriminating shortwaveers and other listening enthusiasts love Icom's R75. It's a great way to enjoy the hobby without breaking the bank. The R75 is compact enough for a small tabletop. Yet it's big enough to offer a well laid out front panel, a direct frequency entry keypad, and plenty of easy to use controls. User-friendly menu system and memory channel management, too. For great selectivity, great size, and a great price, get your R75 from Grove today!

- 0.03 - 60 MHz\*
- USB, LSB, CW, RTTY, AM, FM
- 99 memory channels
- Optional DSP
- Dual passband tuning
- Automatic notch filter
- Noise blanker with dual preamps
- Built-in attenuator and RF gain control
- Internal clock with ON/OFF, sleep timer



## IC-R8500

### Professional Grade. For Export or Government Approved Users Only

The R8500 is a handsome DC-to-daylight receiver, offering a superb design, remarkable performance, and first-rate build quality.

- 0.01 - 2000 MHz\*
- SSB (USB, LSB), AM (wide, normal, narrow), FM (normal, narrow), WFM. Optional CW (normal, narrow)
- 1000 memory channels
- 10Hz resolution
- Built-in high quality crystal
- IF shift
- Audio peak filter
- S-meter squelch
- RS-232C interface
- 3 Antenna connectors



# VHF/UHF BASE ANTENNAS

## NEW Grove Scanner Beam III!

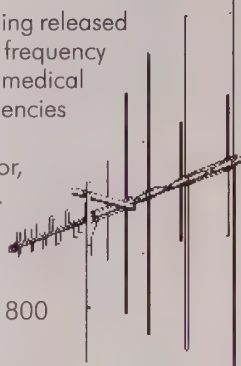
Grove's highly-regarded Scanner Beam has been improved with higher gain, and is being released at a special introductory price! Mount it high and in the clear for full-spectrum VHF/UHF frequency coverage from 30-1000 MHz! Hear law enforcement agencies, firefighters, emergency medical teams, aircraft, marine radio, trains, FM and TV broadcasting, business band, federal agencies and more—up to 100 miles away!

Lightweight and compact, all parts are included—balun transformer with F connector, offset boom, U-clamp. No assembly required—just rotate and latch the elements into place. Point it in any direction for maximum reception, or aim it with an inexpensive TV rotator.

### Specifications:

**DIMENSIONS:** Boom length, 60"; Rearmost element, 96".

**GAIN:** 30-50 MHz, 0 dBd (unity); 100-200 MHz, 4-6 dBd; 400-500 MHz, 6-8 dBd; 800 MHz+, 10-12 dBd.



### Suggested Accessories:

CBL50 - 50' F to F RG6U cable .....\$19.95

CBL100 - 100' F to F RG6U cable .....\$24.95

SWC01 - Antenna Switch .....\$19.95

No standard 2nd day shipping due to weight. Call for rates.

**Order ANT03**

**Our Price: \$69<sup>95</sup>**

**Shipped only in U.S. & Canada**

## Grove OMNI II

Designed by Bob Grove, this exclusive Grove product offers 25-1300 MHz coverage for modern scanners; lightweight, compact design, high performance, and low cost! Designed especially for wide-area metropolitan listeners, the 68" Omni can be mounted on a mast, in an attic crawl space, against a wall—just about anywhere convenient.

**BONUS FEATURE!** Although the Omni is essentially non-directional, a metal mast gives it useful directional properties. Overload interference from paging transmitters, weather stations, FM or TV broadcasters, or other sources may be reduced or eliminated when positioning the antenna on the mast at the time of installation! Similarly, a distant, weak signal may be peaked by the same technique!

Balun transformer with F connector, offset pipe, mounting hardware and full instructions included.



### Suggested Accessories:

CBL50 - 50' F to F RG6U cable .....\$19.95

CBL100 - 100' F to F RG6U cable .....\$24.95

SWC01 - Antenna Switch .....\$19.95

**Order ANT05**

**Our Price: \$29<sup>95</sup>**

**Shipped only in U.S. & Canada**

## Scantenna

**Includes 50' of coax cable plus BNC connectors!**

This omnidirectional scanner antenna will equal or outperform any competitor on the market. Its dipole-cluster design utilizes broadband techniques to provide continuous frequency coverage from 25-1300 MHz, offering superb reception of public safety, civilian and military aircraft, hams, personal communication devices, maritime, CB—anything in its frequency range! Size 7-1/2"H x 4-1/2"W.

If more than 50' of cable is needed, order the ADP26 (F/F barrel connector) along with CBL50 or CBL100.



**Order ANT07 - Our Price: \$49<sup>95</sup>**

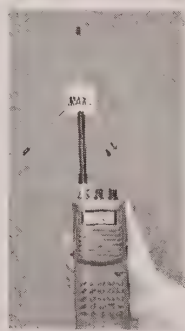
No standard 2nd day shipping due to weight. Call for rates.

**Shipped only in U.S. & Canada**

## High Performance 800 MHz Portable Antenna

The Max Systems antenna will make a tremendous improvement in the 806-960 MHz reception over the whip provided with your hand-held or desktop scanner! (Not usable in other frequency ranges.)

Equipped with standard BNC connector; rugged ground-plane construction for optimum performance. Only 7-1/2" tall. Comes with straight connector for handhelds (ANT-22 shown in use with a handheld scanner).



**Order ANT23 w/right-angle BNC Connector - Our Price - \$34<sup>95</sup>**

7540 Highway 64 West Brasstown, NC 28902 (800) 438-8155 (828) 837-9200

fax: (828) 837-2216 email: [order@grove-ent.com](mailto:order@grove-ent.com) web: [www.grove-ent.com](http://www.grove-ent.com)

Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



## Nil-Jon Multiband Base Antenna

Imagine improving your VHF/UHF base station communications or scanner monitoring by substituting one low-profile (17" H), multi-element antenna system on your antenna line! Its patented, tilted, three-element design uses harmonic patterning to improve VHF/UHF reception and transmission without retuning! Ideal for modern, 25-1300 MHz, wide-coverage scanners, and for 100 watt commercial, amateur, and government transceivers operating in the 140-174 and 406-512 MHz ranges.

Its broadband design accepts modern repeater splits, cross-band, and wideband spread spectrum. Unique sloped elements reduce picket fencing. Stainless-steel whips with turn screws fit securely into an NMO aircraft aluminum base fixture. The antenna assembly clamps securely to your tower or mast pipe and is equipped with an SO-239 connector to match your PL-259-equipped coax cable.

**Order ANT10MBS - Our Price: \$99<sup>95</sup>**

**ANT61MBS - Super-M Ultra Base Station - 25-6000 MHz, more elements - \$189.95**



## WiNRADiO AX-71C UHF Antenna

The AX-71C antenna is a compact VHF/UHF omni-directional receiving and transmitting antenna for professional and consumer surveillance and monitoring applications.

The antenna covers the frequency range of 25-3000+ MHz offering a typical VSWR figure of less than 1.5:1.

While designed to be entirely general-purpose, the WiNRADiO AX-71C Wideband Discone Antenna is especially suitable for the WiNRADiO range of VHF/UHF receivers.

Its durable construction from high-grade stainless steel, alloy and aluminum will ensure trouble-free operation for many years. The antennas was designed for rapid and easy assembly.

### **Suggested Accessories:**

ACC71 - Mounting clamps .....	\$14.95
CBL50 - 50' F to F RG6U cable .....	\$19.95
CBL100 - 100' F to F RG6U cable .....	\$24.95
SWC01 - Antenna Switch .....	\$19.95



**Order ANT01**

**Our Price: \$89<sup>95</sup>**

## WiNRADiO AX-31C Active UHF Antenna

The AX-31C antenna is a compact VHF/UHF log-periodic directional antenna, a successor to the popular AX-31B antenna, with improved performance and reduced weight and dimensions, as well as additional packaging options: an outdoor mounting version and a hand-held one.

This antenna is constructed on a high-quality fibre-glass substrate, with an integrated low noise amplifier. The user can also specify antenna versions without the inbuilt amplifier, which does not require any power to operate. Versions without the amplifier can be also used as low power transmit antennas.

The AX-31C antenna covers a frequency range of 290 to 2200 MHz (a wider frequency range can be still received with reduced gain) and is ideally suited for reception of point-to-point communications where its directional characteristics can significantly improve rejection of interfering signals. The directionality is especially significant above 400 MHz; under 400 MHz the directionality gradually declines to the point when the antenna acts as a non-directional dipole.

While designed to be entirely general-purpose and performing well with any third-party equipment, the WiNRADiO AX-31C antenna is especially suitable for WiNRADiO G3 Series of VHF/UHF receivers, in both professional and consumer applications.

## WiNRADiO AX-31C

**Order ANT58 - Our Price: \$139<sup>95</sup>**

Base board only, no enclosure, with preamplifier, receive only, 9V battery power.

**NOTE: In the AX-31C and AX-37A series, these suffix letters indicate the options:**

**H:** Hand Grip   **M:** Mast Mounting   **P:** Preamplifier   **X:** Transmit

**WiNRADiO AX-31CP** Base board only, no enclosure, with preamplifier, receive only, 12V battery power.

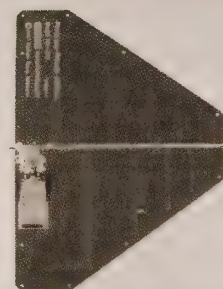
**WiNRADiO AX-31CX** Base board only, no enclosure, no preamplifier, receive and transmit.

**WiNRADiO AX-31CH** Ruggedized enclosure with hand grip, with preamplifier, receive only, external 12V DC power.

**WiNRADiO AX-31CHX** Ruggedized enclosure with hand grip, no preamplifier, receive and transmit.

**WiNRADiO AX-31CM** Ruggedized enclosure for outdoor mast-mounting, with preamplifier, receive only, external 12V DC power.

**WiNRADiO AX-31CMX** Ruggedized enclosure for outdoor mast-mounting, no preamplifier, receive and transmit.





## The Mighty Condor!

Looking for a suitable rubber duckie scanner antenna to replace the factory issue? Try this one which has become the standard of the industry. Made for the two-way communications community, the 12" Austin Condor is guaranteed to improve weak signal scanner reception throughout the 100-1300 MHz frequency ranges compared to your original scanner antenna.

**Order ANT14B w/right-angle BNC Connector - Our Price - \$39<sup>95</sup>**

## Grove Flex-Tenna™ VU



The 48 inch Model VU Flex-Tenna™ is a thin and inconspicuous, flexible-wire antenna designed to provide continuous 25-2500 MHz reception on scanners. Since it's a narrow length of clear-insulated cable, it is an excellent choice for low-visibility installations. Has an F connector. Make sure to choose the correct adaptor for your needs.

### Suggested Accessories:

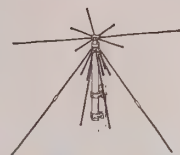
CBL50 - 50' F to F RG6U cable .....\$19.95  
CBL100 - 100' F to F RG6U cable .....\$24.95  
CBL09 - F Male ~ F Male Coax (3') .....\$1.25

**Order ANT46 - Our Price - \$9<sup>95</sup>**

## VHF/UHF WIDEBAND ANTENNAS

### AOR DA3000 Extended-Range Discone

For continuous-coverage 30-2000 MHz VHF/UHF receivers and scanners, and even 100 watt transmitters on most VHF-HI and UHF frequencies, you can't beat this rugged discone! Stainless steel tubing combines light weight with rough-weather durability. Includes 50 feet of low-loss coax with BNC connector, two U clamps, TNC connector at antenna end, and tough 2-1/2" mast mount.



**Order ANT11 - Our Price: \$139<sup>00</sup>**

**Customer Comments:** *"As a recently licensed Ham, I wanted to thank you for offering your low cost MTEexpress subscription. Convincing the YL was a piece of cake and with a couple of issues under my belt I can say nothing beats the price, convenience or speed with which I can receive issues of your fine magazine. Keep up the good work!"*

*- Michael L., Eastlake, OH*

### AOR SA-7000 Super-Wide Receiving Antenna

Designed for wide-frequency-coverage receivers and scanners, the SA-7000 base antenna is rigidly constructed of stainless steel and aluminum and comes with 50' of RG 58U coaxial cable terminated with a BNC connector. Engineered to provide a 50 ohm match, the SA-7000 is 71 inches tall and mounts on a mast up to 2-1/4" diameter. Complete passive system brings superior low noise and free of cross / intermodulation.

### Specifications:

Receiving Range: 30 kHz - 2GHz  
Height: 72 in  
Wind Load: Withstands in excess of 100 MPH

**Order ANT39**

**Our Price: \$229<sup>95</sup>**

**For cables and adaptors, see page 37**

7540 Highway 64 West Brasstown, NC 28902 (800) 438-8155 (828) 837-9200

fax: (828) 837-2216 email: [order@grove-ent.com](mailto:order@grove-ent.com) web: [www.grove-ent.com](http://www.grove-ent.com)

Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



## Diamond Wide Frequency Coverage Discone Antenna

The discone antenna is used by government and military agencies worldwide because of its wide bandwidth characteristics and non-directional coverage. Diamond offers this professional-grade discone at a popular price.

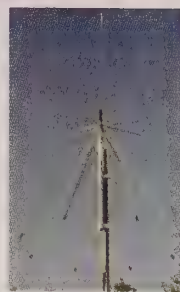
Designed for use with wide-frequency-coverage VHF/UHF scanners and receivers, the Diamond D130J discone consists of 16 rugged, stainless-steel elements and is capable of transmitting up to 200 watts in the amateur 50, 144, 220, 432, 900, and 1200 MHz bands.

The elements are arranged on a 24-inch support pipe equipped with two strong mounting brackets to accommodate any standard mast-pipe (1" to 2-1/8" diameter).

Requires PL-259 Adaptor.

### Suggested Accessories:

ADP02 - F FEMALE TO PL259 "UHF" FEMALE ADAPTER	\$3.99
CBL50 - 50' F to F RG6U cable	\$19.95
CBL100 - 100' F to F RG6U cable	\$24.95
SWC01 - Antenna Switch	\$19.95



**Order ANT09**

**Our Price: \$99<sup>95</sup>**

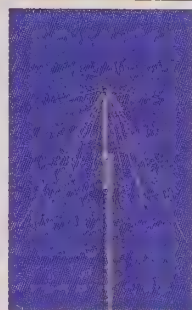
## Icom AH-8000 Antenna

Continuous frequency coverage from 100MHz-3300MHz (3.3 GHz) is ideal for the new wide-frequency coverage receivers from ICOM, AOR, WINRADIO, ALINCO and scanners, too! Use it for transmitting up to 200 watts on ham\*, government, military, aircraft and commercial bands as well!

Compact (36") and lightweight (2.1 lbs.); 1"-2" mast mount hardware included. Rapid deployment with factory-cut elements--no adjustments required! Comes with 49' of coax with type N connectors.

\* Best impedance match for amateurs on 144, 430, 1200 and 2400 MHz band

Recommended accessory: N/BNC adaptor



**Order ANT54 - Our Price - \$249<sup>95</sup>**

## WINRADIO AX-37A Series Planar, Log-Periodic Antennas

Designed to work with all UHF receivers including the WINRADIO 3000 series, the AX-37A is a compact, directional, planar, log-periodic, UHF directional antenna. Etched on a high-quality fiberglass substrate, it includes a surface-mount, 20 dB preamplifier, a standard 9V battery holder, power switch and an LED indicator.

Suitable for indoor monitoring, surveillance and point-to-point communication (receive only), its directivity can substantially null co-channel interference. Its small footprint (the size of a sheet of typing paper), light weight and thin profile invite concealed installation, quickly accomplished with double-sided adhesive tape.

### TECHNICAL SPECIFICATIONS

Frequency range: 300-3000 MHz (wider with reduced gain)

Antenna Forward Gain: 6.0 dBi (free space)

Amplifier Gain: 23 dB @ 1 GHz, Amplifier Noise Figure: 2.0 dB

Amplifier IP3: +27 dBm, Primary Sensitivity: E-field

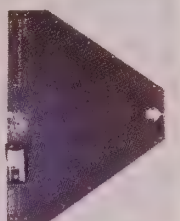
Polarization: Horizontal or vertical (depending on mounting)

Impedance: 50 ohm (Nominal)

Power: 9V @ 40 mA (standard PP3 battery), Connector: SMA

Front-to-back ratio: 18 dB min (180 degrees from main lobe)

VSWR: 1.3:1, Size: 11.5" x 8.4", Weight: 5 oz



### WINRADIO AX-37A

**Order ANT28 - Our Price: \$389<sup>95</sup>**

Base board only, no enclosure, with preamplifier, receive only, 9V battery power.

### WINRADIO AX-37AH

**Order ANT29 - Our Price: \$499<sup>95</sup>**

Ruggedized enclosure with hand grip, with preamplifier, receive only, external 12V DC power.

**NOTE: In the AX-31C and AX-37A series, these suffix letters indicate the options:**

**H:** Hand Grip **M:** Mast Mounting **P:** Preamplifier **X:** Transmit

**WINRADIO AX-37AP** (special order) Base board only, no enclosure, with preamplifier, receive only, 12V battery power.

**WINRADIO AX-37AX** (special order) Base board only, no enclosure, no preamplifier, receive and transmit.

**WINRADIO AX-37AHX** (special order) Ruggedized enclosure with hand grip, no preamplifier, receive and transmit.

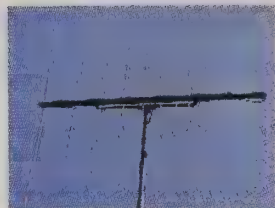
**WINRADIO AX-37AM** (special order) Ruggedized enclosure for outdoor mast-mounting, with preamplifier, receive only, external 12V DC power.

**WINRADIO AX-37AMX** (special order) Ruggedized enclosure for outdoor mast-mounting, no preamplifier, receive and transmit.



## Create Log-Periodic Beam

The log-periodic dipole array (LPDA) is respected for its wide bandwidth, constant impedance, and high gain. Measuring 6'8" boom length, the CLP-5130-1N (ANT16) offers 50-1300 MHz bandwidth for transmitting and receiving, with an average forward gain of 10-12 dBi. The CLP-5130-2N (ANT17) offers 100-1300 MHz bandwidth for transmitting and receiving, with an average forward gain of 11-13 dBi. Ruggedly constructed of solid aluminum for lightweight durability. Fitted with an N connector for your low-loss coax.



**Order ANT16 - Our Price - \$409<sup>95</sup>**

**Order ANT17 - Our Price - \$299<sup>95</sup>**

## VHF/UHF MOBILE ANTENNAS

### Procomm CD144MBN

HIGH PERFORMANCE, LOW PROFILE, MOBILE SCANNER ANTENNA

We have replaced our popular Stealth antenna with this mechanically improved model that features a tight hold, wind resistant, chrome finish, 3.25" magnetic base built to withstand high road speeds. The 20" stainless steel whip can receive 25-1000 MHz (best above 100 MHz) and makes a great 2 meter transmit/receive antenna, or you can shorten it to resonance on any VHF-HI or UHF band of your choice (Allen wrench included). 12 feet of RG58/U coax cable (not the usual, lossy RG-174/U) is terminated with a BNC connector for your scanner or transceiver.



**Order ANT50 - Our Price: \$19<sup>95</sup>**

### AOR MA500

For mobile applications, this magnetic-base, center-loaded, 24" trap-loaded whip provides superior VHF/UHF reception from 30-2000 MHz, and can be used for transmitting as well on VHF-HI and UHF land mobile frequencies. Includes 25 foot RG58U cable with BNC and PL-259 connectors.



**Order ANT12 - Our Price: \$99<sup>00</sup>**

### Nil-Jon Super-M Superior Mobile Antenna



Unique, tilted, three-element design uses harmonic patterning to improve VHF/UHF reception! Ideal for modern, wide-coverage scanners, 25-1300 MHz, and for 100 watt commercial, amateur, and government transmitters between 140-174, 216-225, and 406-512 MHz without retuning!

Its broadband design accepts modern repeater splits, cross-band, and wideband spread spectrum. Unique sloped elements reduce picket fencing. Stainless-steel whips with turn-screws fit securely into an aircraft-aluminum base fixture, waterproof-sealed by a rubber gasket.

A rigid-grip magnetic mount with 12' low-loss cable and a BNC connector are provided.

**Order ANT10 - Our Price: \$94<sup>95</sup>**

**ANT61 - Super-M Ultra Mobile Antenna - 25-6000 MHz, more elements - \$124.95**

### Nil-Jon Antenna with NMO Base

This high-performance, low profile (17" H) mobile replacement antenna is guaranteed to improve multiband mobile communications over other whips! Its patented, tilted, three-element design uses harmonic patterning to improve VHF/UHF reception and transmission without retuning! Ideal for modern, 25-1300 MHz, wide-coverage scanners, and for 100 watt commercial, amateur, and government transceivers operating in the 140-174, 216-225, and 406-512 MHz ranges.

Its broadband design accepts modern repeater splits, cross-band, and wideband spread spectrum. Unique sloped elements reduce picket fencing. Stainless-steel whips with turn screws fit securely into an aircraft-aluminum base fixture. Fitted with a standard NMO base adaptor for existing 3/4" Motorola mobile mounts.



**Order ANT10NMO - Our Price: \$79<sup>95</sup>**

**ANT61NMO - Super-M Ultra Mobile with NMO Base - 25-6000 MHz, more elements - \$109.95**

7540 Highway 64 West Brasstown, NC 28902 (800) 438-8155 (828) 837-9200

fax: (828) 837-2216 email: [order@grove-ent.com](mailto:order@grove-ent.com) web: [www.grove-ent.com](http://www.grove-ent.com)

Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.





## Range-Extending Mobile Mag Mount!

Extend the range of your hand-held radio--simply attach your BNC whip and snap this rugged magnetic mount to the top of your vehicle or even an indoor metal surface (file cabinet, etc.)! Great for scanners, handy-talkies, law enforcement and commercial hand-held transceivers, government/military portables.

The heavy-duty, low-profile, magnetic mount is made of high-grade steel with rubber weatherproofing. It won't come loose at highway speed, yet it's instantly removable for security or storage. Includes 12 feet of RG-58/U coax with BNC connector.

### OPTIONAL ACCESSORIES

ANT47 - WiNRADiO AX-07B flexible VHF/UHF antenna .....	\$24.95
ANT06 - Universal telescoping whip antenna .....	\$14.95
ANT14 - Austin Condor 12" flex antenna.....	\$34.95
ANT22 - Max System 800 MHz handheld antenna .....	\$29.95

**Order ANT48 -**  
**Our Price - \$24<sup>95</sup>**

## HANDHELD SCANNER ANTENNAS

### The Mighty Condor!

Looking for a suitable rubber duckie scanner antenna to replace the factory issue? Try this one which has become the standard of the industry. Made for the two-way communications community, the 12" Austin Condor is guaranteed to improve weak signal scanner reception throughout the 100-1300 MHz frequency ranges compared to your original scanner antenna.

**Order ANT14 - Our Price - \$34<sup>95</sup>**



### High Performance 800 MHz Portable Antenna

The Max Systems antenna will make a tremendous improvement in the 806-960 MHz reception over the whip provided with your hand-held or desktop scanner! (Not usable in other frequency ranges.)

Equipped with standard BNC connector; rugged ground-plane construction for optimum performance. Only 7-1/2" tall. Comes with straight connector for handhelds (ANT-22 shown in use with a handheld scanner).

**Order ANT22 - Our Price - \$29<sup>95</sup>**

### Grove Universal Telescoping Whip

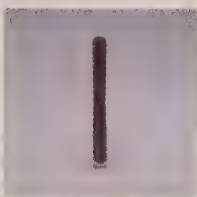
For ham and commercial handie-talkies as well as hand-held scanners, the Grove rugged, chrome, telescoping whip features a swivel BNC base, allowing the whip to be used straight or turned to a right angle for those special applications between 100 and 1000 MHz.

Adjustable length from 6" to 29" allows frequency optimization. Quarter-wave resonance at VHF hi band, 3 dB gain or more over rubber duckies at UHF.

**Order ANT06 - Our Price: \$14<sup>95</sup>**



### WiNRADiO AX-07B Flexible VHF/UHF Antenna



The AX-07B is a rugged antenna designed for reception and low-power transmission in the 100-900 MHz range.

The flexible antenna is encapsulated in a weatherproof rubber sheath resistant to chemical corrosion, abrasion, ozone, salt water and ultra violet radiation, making it ideal for outdoor applications.

**Order ANT47 - Our Price - \$24<sup>95</sup>**

**For cables and adaptors, see page 37**



# HF OUTDOOR ANTENNAS

## Grove Flex-Tenna™ HVU

The 24-foot Model HVU Flex-Tenna™ is a thin and inconspicuous, flexible-wire antenna designed to provide continuous 10 kHz-2500 MHz reception on shortwave receivers, wide-frequency-coverage receivers and scanners with only one antenna connector. Since it's a narrow length of clear-insulated cable, it is an excellent choice for low-visibility installations. HF male connector. Choose correct adaptor for your receiver and scanner needs.



### Suggested Accessories:

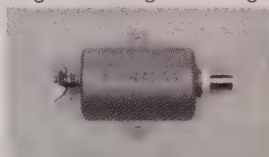
CBL50 - 50' F to F RG6U cable .....\$19.95  
CBL100 - 100' F to F RG6U cable .....\$24.95  
CBL09 - F Male ~ F Male Coax (3') .....\$1.25

**Order ANT45 - Our Price: \$14<sup>95</sup>**

## WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter

Often referred to as Long Wire Balun, this device is used to match the impedance of a long wire HF antenna to a 50 ohm input impedance of a receiver. Such impedance matching usually results in a significant signal strength increase (up to 17dB in some cases, and approximately 5dB on average), compared to the long wire antenna connected directly to the antenna input of the receiver.

The WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter is designed to work on medium and short wave bands, covering a frequency range from 0.1 to 30 MHz. It is especially suitable for use with WiNRADiO shortwave receivers, such as the WR-G303i receiver.



Unlike most conventional antenna adapters, the WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter employs a dual broadband transformer technique which offers an improved performance over single-transformer devices. Requires BNC adaptor/connector.

ADP09 - F Female to BNC Male .... \$2.99  
CBL50 50' - F to F RG6U cable ..... \$19.95  
CBL100 100' - F to F RG6U cable .. \$24.95

**Order ADP35 - Our Price: \$39<sup>95</sup>**

## PAR HIGH-PERFORMANCE "END FEDZ" SHORTWAVE ANTENNA!

The PAR End Fedz 45-foot, commercial-quality, end-fed receiving antenna is made of virtually-indestructible Flex Weave, covered by a protective black polyethylene jacket. Impedance-matched by a 9:1, binocular-core transformer in a weather- and UV-resistant ABS housing, the wire element is firmly attached by stainless steel hardware. You may custom-configure the shorting bar for grounding the antenna. A silver/Teflon SO-239 coax connector is ready to receive the PL-259 on your coax cable.

Mount this beauty outdoors, in the attic, or any other preferred spot for unsurpassed, 1-55 MHz reception! Instructions include patterns for horizontal or slope mounting.

CBL50 50' - F to F RG6U cable ... \$19.95  
CBL100 100' - F to F RG6U cable \$24.95  
ADP02 - F to PL259 adaptor ..... \$3.99

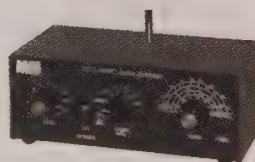


**Order ANT08 - Our Price: \$66<sup>95</sup>**

# HF INDOOR ANTENNAS

## MFJ 1020C ACTIVE SHORTWAVE ANTENNA

If you can't use an outdoor shortwave antenna, the popular MFJ 1020C is the way to go. Featuring 300 kHz-40 MHz frequency-selectable coverage, and including its own 20-inch telescopic whip, the 1020C may be used as a preselector for outdoor antennas as well. Controls include gain, band, tuning, and bypass. Rear-panel SO-239 connectors are provided. Only 6-1/2"W x 2-1/2"H, the 1020C operates either from an internal 9V battery (not supplied) or an optional 9-12 VDC AC adaptor; a red LED lets you know the unit is on.



### Suggested Accessories:

PWR04 - AC Adaptor..... \$14.95  
CBL11 - 3' PL-259/PL-259 Interconnect Cable . \$4.99

**Order ANT19**  
**Our Price: \$89<sup>95</sup>**

7540 Highway 64 West Brasstown, NC 28902 (800) 438-8155 (828) 837-9200  
fax: (828) 837-2216 email: order@grove-ent.com web: www.grove-ent.com  
Technical Questions? (828) 837-9200 or tech@grove-ent.com. Due to high call volume, technical calls will be limited to 3 minutes.



## WiNRADiO AX-17C Indoor Active HF Antenna

The AX-71C antenna is a compact VHF/UHF omni-directional receiving and transmitting antenna for professional and consumer surveillance and monitoring applications.

The antenna offers a reception range of 25-3500+ MHz, and a transmit range (2:1 VSWR or lower) from 100-3500 MHz.



**Order ANT60 - Our Price: \$199<sup>95</sup>**

## Grundig AN200 Loop Antenna

For AM broadcast band (540-1700 kHz) portables, nothing peps up a portable's reception like an external loop antenna.

Place the AN200, a low cost, 9" diameter, tunable loop alongside any radio with a built-in ferrite loop antenna and tune it for dramatically magnified reception.

For direct connection to a radio's external antenna jack, a 3" shielded lead with a stereo phone plug on one end and tinned wires on the other is provided



**Order ANT59 - Our Price: \$29<sup>95</sup>**



## AOR LA-390

The LA380 is a compact active (1 foot diameter) loop antenna specifically designed to provide good reception when away from the main monitoring location or when large external antennas are not practical. Compact, but achieving high performance, it features an internal high-gain amplifier (20dB for 10kHz-250MHz) and excellent overall strong signal handling (high IP3 +10dBm).

**Supplied Accessories:** 120V AC Power Supply, BNC-BNC Coaxial cable, Manual

**Order ANT55 - Our Price: \$379<sup>95</sup>**

## Grove SW Pocket-Tenna



Pocket Shortwave Antenna for Wideband Handheld Receivers. Remarkably improved shortwave/longwave reception over the factory whip. Just attach the cable, run the flexible antenna wire out a window or up to a tie point, and enjoy worldwide reception! (20' foot RG174/U cable with BNC connector.) Recommended for Icom, AOR, Yaesu, Alinco wideband, handheld receivers.

### **Suggested Accessories:**

ADP33 - SMA Adaptor

\$3.99

**Order ANT25 - Our Price: \$19<sup>95</sup>**

## LF Engineering H-900 Gain Probe Antenna

LF Engineering has appointed Grove to be the exclusive distributor of the enhanced-performance, H-900 Gain Probe active antenna, with additional gain for weak signal reception, and increased dynamic range to withstand strong-signal overload and avoid desensitization from close-by transmitting antennas!

Includes integrated active antenna, 50 feet of RG174U w/ RCA coax lead-in, control box, 36" jumper with RCA plug; {adaptors to fit your receiver listed below} and AC adaptor.

### **SPECIFICATIONS:**

Dimensions: 25" long, 1" diameter

Frequency coverage: 10 kHz through 60 MHz (-3 dB)

Equivalent performance: 100' dipole

Integrated amplifier: MOSFET / Gain: Up to 12 dB / Additional gain switch: 10 dB

Connectors: RCA Phono jacks

Remote cable: 50' RG-174/U (extendable to 250' by user-provided cable)

ADP32 - RCA Female to PL259 Male ..... \$2.99

ADP25 - RCA Female to Male 1/8" Mini-Plug ..... \$2.99

ADP01 - RCA Female to BNC male ..... \$2.99



**Order ANT27 - Our Price: \$189<sup>00</sup>**

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Technical Questions? (828) 837-9200 or tech@grove-ent.com. Due to high call volume, technical calls will be limited to 3 minutes.

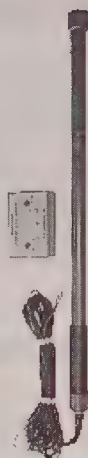


## H800 Skymatch Active Antenna

The H-800 Active Antenna covers the full LF/HF/VHF spectrum from 10kHz through 50 MHz. A proprietary low noise amplifier (2 wire feed) insures ample gain throughout the operating spectrum. The output impedance on the H-800 is 50-100 ohms, and is designed to match most receivers in use today. The Receiver Coupler may be powered by two 9 volt batteries for operation. An external 120 vac / 12 vdc power supply is included for continuous operation.

The sealed antenna probe consists of impedance matching electronics and amplifier which transform its internal short length wire antenna into a 100 foot "long wire" equivalent. The H-800 has very high E field sensitivity with the advantage of good BC intermodulation rejection. The H-800 is compact and totally sealed (no whip) providing the advantage of reduced EMI interference.

Dual source power design: Internal 9 volt battery (x2) or external 120 vac / 12 vdc supply included. **Includes integrated active antenna, 50 feet of RG174U w/ RCA coax lead-in, control box, and AC adaptor. Equipped with RCA jack and additional adaptors maybe required for use with receivers.**



ADP32 - RCA Female to PL259 Male ..... \$2.99

ADP25 - RCA F to M 1/8" Mini-Plug ..... \$2.99

ADP01 - RCA Female to BNC male ..... \$2.99

**Order ANT15 - Our Price: \$149<sup>00</sup>**

## Grove's Hidden Flex-Tenna

The Hidden Flex-Tenna is easily installed in an attic crawl space and provides continuous 10 kHz-2500 MHz reception for wide-frequency-coverage receivers and scanners! When an outdoor antenna is not an option, the Hidden Flex-Tenna will provide optimum indoor reception.

Measuring 24 feet in length (the longwave/shortwave elements) and supporting a short hanging pair (VHF/UHF elements), the flexible Hidden Flex-Tenna may be conveniently suspended from the roof trusses. A convenient F connector allows connection to your coax down-lead.

### Suggested Accessories:

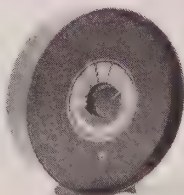
CBL50 - 50' F to F RG6U cable ..... \$19.95

CBL100 - 100' F to F RG6U cable ..... \$24.95

CBL09 - F Male ~ F Male Coax (3') ..... \$1.25

**Order ANT49 - Our Price: \$19<sup>95</sup>**

## Select-A-Tenna Medium-Wave Loop Antenna Booster



Apartment dwellers and mobile home owners, boost your 530-1700 kHz AM broadcast reception up to 30 dB with the famous Select-A-Tenna! Improves adjacent channel rejection, reduces signal fading. Tuning knob selects your listening frequency.

No batteries, power, or connection required to AM radios with internal antennas. Simply set the Select-A-Tenna next to your radio, peak the tuning knob, and listen to AM broadcast signals soar out of the background noise!

This 11", high-Q loop antenna focuses its captive signals to your radio's internal ferrite loop without any physical connection! If your receiver requires an external antenna, a convenient 3.5 mm (1/8") jack and plug are provided.

Connect an outside wire to the Select-A-Tenna and receive medium wave signals like you've never heard before!

**Order ANT21 - Our Price: \$59<sup>95</sup>**

## Super Select-A-Tenna

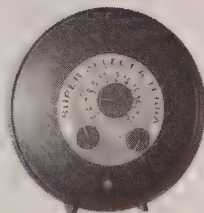
Up to 40 dB gain over your portable's internal AM antenna! Coarse and fine tuning allow accurate signal adjustment from 530-1700 kHz; regenerative amplifier boosts incoming signals. May be used as a wireless-coupled loop, or directly wired to the external antenna jack of your radio, or to tune a larger outdoor antenna!

### Specifications:

The Super Select-A-Tenna is an active device with additional controls that has an internal regenerative amplifier and requires a 9V battery (not included). The unit has an additional variable 0dB to +10dB gain added to the intrinsic +30dB for a useful gain up to +40dB. The unit has both Coarse and Fine Tuning controls for ease of operation at the higher gain settings. It also has the capability to effectively drive a remote ferrite probe. This is useful on applications of large case radio installations that the Super Select-A-Tenna cannot access directly with it's intrinsic near proximity effect.

The 541-S has a high-signal level and low-impedance balanced drive port for the ferrite probe. This provides the capability to not only drive the 6 ft. coaxial cable and probe, which are included, but the cable may be extended to as much as 26 ft using extension cables readily available locally. This is very useful for remotely locating the 541-S away from radio noise sources or into better signal locations, when moving the radio itself may be inconvenient.

**Supplied Accessories:** External Antenna & Ground Cable Assembly {terminates 2 Wire}, Ferrite Probe Cable Assembly {terminates RCA male}, Ferrite Probe Antenna.



**Order ANT40 - Our Price: \$179<sup>95</sup>**

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Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



# ANTENNA ACCESSORIES

## Premium Low-Loss RG6-U Cable

All Grove RG-6 /U coaxial cable is 100% shielded, providing low loss (see description below). It comes with easy-to-adapt F connectors on both ends, fitting our wide range of adaptors.

Have you had trouble finding the right coaxial adaptors for linking your antenna and receiver? We can help! Simply tell us what adaptors you need, or what antenna and radio you will be using. We will provide you with a cable which is ready to attach between your antenna and receiver! 50 & 100 ft. length, comes with 2 adaptors at no extra charge (specify from list above when placing order)

Cable Loss Per 100 ft.: 1.6 dB @ 50 MHz; 2.6 dB @ 170 MHz; 4.6 dB @ 450 MHz.

**FREE SHIPPING in the US if ordered with antenna!**

CBL50	50' of low-loss RG6-U cable .....	\$19.95
CBL100	100' of low-loss RG6-U Cable.....	\$24.95

### ADAPTORS:

ADP01	RCA Female to BNC male adapter.....	\$2.99	ADP25	RCA Female to 3.5mm Male adapter .....	\$2.99
ADP02	F Female to PL259 "UHF" Male adapter.....	\$3.99	ADP26	F Female to F Female Barrel adapter (qty 2) .....	\$1.99
ADP03	F Female to N Male adapter.....	\$3.99	ADP32	RCA Female to PL259 "UHF" Male adapter .....	\$2.99
ADP04	BNC Female to N Male adapter .....	\$3.99	ADP33	BNC Female to SMA Male adapter .....	\$3.99
ADP05	F Female to Male 1/8" Mini adapter .....	\$2.99	CBL04	3' cable, BNC to BNC.....	\$4.95
ADP07	UHF Female to F male adapter .....	\$2.99	CBL09	3' cable, F Male to F Male .....	\$1.25
ADP09	F Female to BNC Male adapter .....	\$2.99	CBL11	3' cable, PL259 to PL259.....	\$4.99
ADP13	BNC Right Angle adapter .....	\$2.99	CBL15	Through-window/door flat cable .....	\$14.95
ADP17	BNC Female to F Male adapter .....	\$2.99			

**Orders for adaptors only will be shipped first class mail in US.**

## Lightning Arrestor/Surge Protector

While nothing can withstand a direct lightning hit, the Grove LAR-1 connects between your antenna cable and radio to prevent induced voltages from nearby lightning strokes, high powered transmitters and other massive energy surges from burning out your equipment (will not prevent AC power line surges).

Not a flimsy spark gap or simple diode shunt, the Grove LAR-1 uses state-of-the-art gas discharge technology, proven in government tests to be the best deterrent against lightning and electromagnetic pulse (EMP) surges.

Responds in one ten-millionth of a second to short-circuit bursts of 250,000 volts and currents of 5000 amps, while allowing normal signal voltages (and even control voltages up to 50 volts AC or DC) to pass undisturbed! Extremely low signal loss-0.2 dB at 1500 MHz! Ideal for protecting scanners, shortwave receivers, CB and ham equipment, VCR's, satellite systems, and more. May be used with transmitters up to 100 watts.

The tiny protector measures only 3/4"D x 1 1/2"L and comes equipped with standard F connectors.

Select an adaptor from the list below **{no extra charge}** to accommodate your receiver or scanner.

ADP02 - F Female to PL259 "UHF" Male adapter	ADP09 - F Female to BNC Male adapter
ADP03 - F Female to N Male adapter	ADP17 - BNC Female to F Male adapter
ADP05 - F Female to Male 1/8" Mini adapter	
ADP07 - UHF Female to F male adapter	

**Order LAR1F - Our Price: \$19<sup>95</sup>**



## Scanner Antenna Splitter

Now you can run two receivers or scanners from one antenna with full 1-1000 MHz frequency coverage! This antenna splitter comes with two three-foot cables for your side-by-side scanners and adaptors for F and BNC connectors.

**Order SPL02 - Our Price: \$29<sup>95</sup>**

## DC-2 GHZ ANTENNA SWITCH

Now you can select between two antennas for your receiver, scanner, or low-power transceiver—or you may choose either of two radios to connect to your antenna!

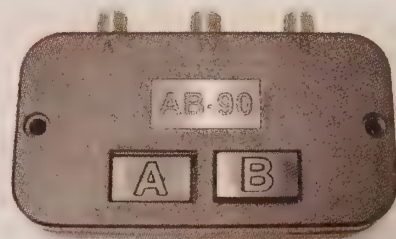
This high-quality, die-cast, waveguide construction assures low-loss performance up through at least 2 GHz (2000 MHz)!

**Comes with two 3' cables, your choice of 3 connectors listed below (specify when placing order), 2 mounting screws and two-sided tape.**

ADP02 - F Female to PL259 "UHF" Male adapter	ADP07 - UHF Female to F male adapter
ADP03 - F Female to N Male adapter	ADP09 - F Female to BNC Male adapter
ADP05 - F Female to Male 1/8" Mini adapter	ADP17 - BNC Female to F Male adapter

**Order SWC01**

**Our Price: \$19<sup>95</sup>**



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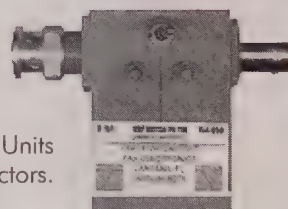
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# TUNERS, PREAMPS & MULTICOUPLERS

## Par Intermod Filters

Now you can restore quiet monitoring on your scanner or VHF/UHF transceiver, drastically reducing that incessant "bleep bleep" interference from local paging transmitters! Simply specify whether the interference is from a 152, 158, or 462 MHz pager, and we'll send you a unit that knocks down that interference by 35 dB! Units may be cascaded for additional interference reduction. Equipped with BNC connectors. Filters are drop-shipped from manufacturer.



### FTR152DS

**\$69<sup>95</sup>**

152MHz

### FTR158DS

**\$69<sup>95</sup>**

158MHz

### FTR462DS

**\$69<sup>95</sup>**

462MHz

### FTR-FMDS

**\$69<sup>95</sup>**

88-108MHz

### FTR-162DS

**\$69<sup>95</sup>**

162MHz NOAA Weather

• DS suffix on product code means item is drop shipped from manufacturer. Please allow 10-14 days for delivery.

## Ramsey Wide-Band Preamplifier

If your scanner reception needs a little boost, this is the preamp to do it! Providing high gain at low noise, and operating continuously over 1 GHz of spectrum, this signal booster can really make a difference in weak signal areas! Equipped with BNC connectors, no adjustment is necessary; just plug your antenna cable into the preamp, and run the 3' BNC/BNC cable (provided by Grove at no extra charge) to the antenna connector on your scanner—that's it! A 120 VAC/12 VDC wall adaptor is included at no extra charge!

### SPECIFICATIONS:

Frequency Range: 1-1000 MHz

Average Gain: 23 dB @ 1-450 MHz, 15 dB @ 450-1000 MHz

Power Required: 10-12 V AC or DC @ 50-75 mA; 120 VAC adaptor included



**Order PRE02**

**Our Price: \$59<sup>95</sup>**

## GRE Super Amplifier *Boost the range of your hand-held scanner.*

The GRE Super Amplifier has 20-dB (adjustable) gain from 100-1000 MHz. BNC connectors allow the unit to be mounted between the scanner and the antenna; a bypass switch permits the unit to be disabled without having to remove it. A 9-volt battery (not supplied) will provide up to 24 hours of continuous operation; a convenient external power jack permits the unit to be used continuously from a 9 V DC wall adaptor (not supplied).



**Order PRE01 - Our Price: \$59<sup>95</sup>**

## AOR LN4000 Low-Noise VHF/UHF Preamplifier

For the discriminating scanner user who needs the best possible weak-signal amplification without amplifying the noise as well, this tiny (1" square) preamp is the answer!

The LN4000 offers 20 dB (typical) signal amplification from 100-4000 MHz (-3 dB), at a low noise figure of only 4.5 dB. It is powered by any convenient 5 to 12 VDC, 30 mA (typical), center pin positive, power supply (available as an accessory).

Includes 10' coaxial receiver/scanner interconnect cable with SMA connectors and BNC adaptors. A 10' power supply cable with DC connector is also provided for remote mounting.

NOTE: Antenna preamplifiers increase the strength of strong signals as well as weak. If you experience strong-signal overload, a filter for the offending frequencies is recommended.



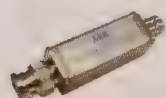
### Suggested Accessory:

PWR24 AOR AA8000 120 VAC Adaptor \$25.00

**Order PRE04 - Our Price: \$189<sup>95</sup>**

## AOR ABF128 INLINE AIRBAND PASS FILTER W/BNC

The ABF128 is a receive (only) bandpass filter especially designed to improve strong signal handling characteristics of receivers for VHF commercial Airband listening. The ABF128 is suitable not only for AOR receivers, but also for most airband and wideband receivers on the market. The addition of ABF128 will provide additional selectivity, and allow the receiver's circuitry to cope much more easily with strong interfering signals such as Band-2 Stereo or Shortwave broadcast transmissions.



**Order FTR07 - Our Price: \$52<sup>95</sup>**

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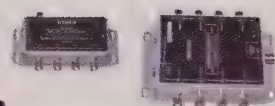
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Technical Questions? (828) 837-9200 or [tech@grove-ent.com](mailto:tech@grove-ent.com). Due to high call volume, technical calls will be limited to 3 minutes.



## Stridsberg Multicouplers

### 2-8 ports, 100kHz-1GHz, active and passive.



Operate multiple receivers or scanners from one antenna; amplified (active) and passive models. Designed for rigid military, government, and commercial monitoring and surveillance applications requiring high intermod rejection, low noise. Die-cast aluminum cases (4-3/8"L x 2-3/8"W x 1-1/4"H) EMI/RFI shielded and fitted with BNC connectors. 120VAC / 12VDC power supplies included with active models. Five-year warranty; (DS=drop-shipped directly to you from the manufacturer.)

CPL06DS - 2 port passive, 100kHz-500MHz.....	\$69.95	CPL03 - 4 port active, 25MHz-1GHz.....	\$184.95
CPL08 - 2 port passive, 10MHz-1GHz.....	\$69.95	CPL01 - 4 port active, 100kHz-50MHz.....	\$184.95
CPL07 - 4 port passive, 100kHz-500MHz.....	\$94.95	CPL02 - 8 port active, 100kHz-50MHz.....	\$334.95
CPL09 - 4 port passive, 10MHz-1GHz.....	\$94.95	CPL04 - 8 port active, 25MHz-1GHz.....	\$334.95

## Mobile Antenna Multicoupler with BNC Adaptor



Enjoy 30-960 MHz mobile scanner reception using your existing AM/FM auto antenna! That's right; no holes, no magnets, no scratched paint or clumsy cables going through doors and windows. Ideal for low-profile monitoring installations where a separate scanner antenna is not desirable.

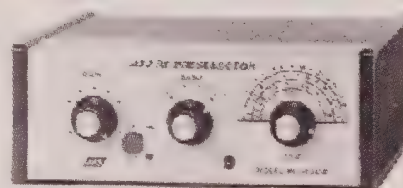
The Para Dynamics PDC 63 Mobile multicoupler takes only seconds to install and allows simultaneous use of your AM/FM car radio as well as your mobile scanner. Comes equipped with a BNC connector.

**NOTE:** Unit is a standard Motorola plug. You will need to check your current AM/FM car stereo antenna jack to verify if it will fit. Some newer model vehicles have a mini plug that will not work with this unit

**Order CPL63B - Our Price: \$16<sup>95</sup>**

## MFJ 1045C Preselector - 1.8-54 MHz

Boost weak signals and reject out-of-band interference and images from 1.8-54 MHz. Boost weak signals up to 20 dB with low-noise, dual-gate MOSFET and bipolar transistors. Choose between two antennas and two receivers from the front panel. Powered by any 9-18 VDC supply.



### Suggested Accessories:

PWR04 - MFJ 1312D AC Adaptor .....	\$14.95
CBL11 - Cable with PL259 on both ends ....	\$4.99

**TUN01 - Our Price: \$82<sup>95</sup>**

## SPEAKERS & RECORDERS

### VALOR VS6 NOISE CANCELING MOBILE SPEAKER

Whether your mobile listening needs are for scanner, shortwave, ham radio, CB, or professional two-way communications, this mobile accessory speaker will improve audio reception. A simple snap of the toggle switch reduces pulse ignition noise and background hiss. Enjoy improved audio with the rugged, 4-inch, 10-watt-rated speaker. Mount the adjustable, steel bracket to your vehicle, plug the 10-foot cord into the 1/8" (3.5 mm) external speaker jack on your radio, and you're ready to go!

Power Rating: 10 watts  
Impedance: 8 ohms.



**SPK07 - Our Price: \$12<sup>95</sup>**

### GAP "HEAR IT" DSP SPEAKER

This compact speaker system utilizes powerful digital signal processing (DSP) to suppress annoying background hiss and static, revealing crisp, clean audio for shortwave reception, scanner monitoring, ham radio transceivers, CB installations, maritime mobile, noisy recordings, and other sources of crackly, hiss-ridden audio. Unlike competitive models which produce harsh, distorted audio with distracting DSP artifacts, the "Hear It" reveals up to 2-1/2 watts of clean, undistorted sound. Controls are provided for volume and DSP level.

Measuring a mere 4-1/3"W x 2-1/2" H x 2-1/2"D and weighing only 7 ounces, The "Hear It" is designed to be used in compact mobile installations and includes a mounting bracket, 8' input cord with 1/8" (3.5 mm.) mini plug, a fused DC power cord, and an instruction booklet. The unit's standard 2.1 mm. power jack will accept 12-28 VDC at approximately 500 mA, making it universally applicable to fixed, mobile, and even aeronautical configurations. The small internal speaker is ideally suited to voice frequencies; for more demanding sound requirements, an external speaker or headphones may be plugged into the 1/8" jack provided.



**SPK05 - Our Price: \$168<sup>95</sup>**

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Technical Questions? (828) 837-9200 or tech@grove-ent.com. Due to high call volume, technical calls will be limited to 3 minutes.



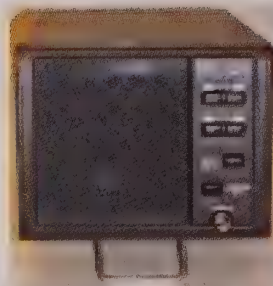
## ICOM SP-23 Noise-Reducing Speaker

This passive (**no power required**) external speaker offers four high- and low-pass pushbutton selections to improve audio quality on any receiver, transceiver or scanner. Reduces shrillness or high-pitched heterodyne interference as well as boominess on audio signals. Contour recovered audio for best reception.

SPECIFICATIONS: Dimensions: 5-3/4"W x 4-1/4"H x 11"D, Weight: 3.6 pounds, Frequency response: 200 Hz – 10 kHz flat, Low-frequency roll-offs: 250 Hz and 500 Hz, High-frequency roll-offs: 1 kHz and 3 kHz, Inputs: Two pushbutton-selectable 1/8" (3.5 mm) mono jacks, 8 ohms nominal impedance, Output: 4 watts at 8 ohms (nom.), Headphone jack: 1/4" monaural, front panel, Speaker: 3" internal

**ACCESSORIES SUPPLIED:** 1/8" – 1/8" mono interconnect cable, Operating instructions

**SPK08 - Our Price: \$184<sup>95</sup>**

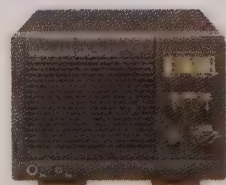


## YAESU SP-8 Communications Speaker

This handsome external speaker is ideal for improving sound from shortwave receivers and scanners. Housed in a professional metal cabinet with gray wrinkle finish, the 5 inch speaker handles up to 3 watts of receiver audio at 8 ohms. A front-panel mode switch allows selection of SSB, CW, manual adjust, or mute. The listener may custom-adjust his listening with multi-position switches for treble and bass.

Push-button selection from either of two RCA phono-jack inputs permits choice of audio source (cable included), and both a quarter-inch and 1/8 inch (3.5 mm) headphone jacks are front-panel accessible.

**SPK04 - Our Price: \$159<sup>95</sup>**



## C Crane Long-Play Versacorder

Now you can listen to your favorite shortwave, talk radio, music broadcast, scanner activity, anytime you want by pre-recording the transmissions—at normal tape speeds or up to four hours on one side of a standard 120 minute cassette (a tape and tri-plug patch cord are provided)!

Excellent as well for preserving conferences with its built-in microphone, and for recording important telephone conversations with an optional patch cord (a beep tone can be activated to remind other telephone callers that a recording is being made).

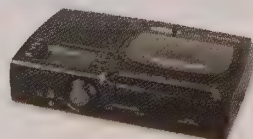
A six-event timer allows you to automatically turn the recorder on at a pre-arranged time and day. You can use the voice activation to economize tape during periods of audio inactivity, or even remote- or manually activate the recorder. The large internal speaker provides quality sound at high playback levels.

Runs on (4) optional "C" batteries or the included AC adapter.

Weight: 2 lbs. 6 ozs. Size: 10" W x 2.625" H x 6.5" D.

Made by Sangean.

**REC01 - Our Price: \$99<sup>95</sup>**



With the optional Telephone Patch Cord, you can record directly from the telephone.  
CBL10 Versacoder Phone Patch Cord..... \$9.95



# TEST EQUIPMENT & POWER SUPPLIES

## WiNRADiO EMR Detector

This tiny, pocket accessory is ideal for detecting the presence of radio and electric fields in your proximity. With a continuous frequency response from 50 Hz to above 1 GHz, and an average sensitivity of 25 uV/cm, this new EMR Detector from WiNRADiO is a very handy gadget!

**Order TST06 - Our Price: \$49<sup>95</sup>**



## MFJ 886 Frequency Counter

The shirt-pocket MFJ-886 offers 1 MHz-3 GHz frequency range, a 100 MHz sensitivity of 0.8 mV and readout to 0.1 Hz, all from a large (3/4"H), 10-digit LCD!

A sensitive bargraph signal strength meter, an accurate 1 ppm time base which can be calibrated externally, rechargeable batteries (included, up to six hours operation), are all part of this rugged, anodized-aluminum-encased pocket instrument which measures only 2-3/4"W x 3-1/4"H x 1-1/4"D, and comes with an AC adaptor/re-charger and telescoping BNC whip antenna at no extra cost!

**Order TST07 - Our Price: \$114<sup>95</sup>**



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## MFJ-269 HF/VHF/UHF SWR ANALYZER

Analyzer covers 1.8 to 170 MHz and 415 to 470 MHz / Built-in calculator shows coax line length in feet and electrical degrees for any frequency and velocity factor; useful for building matching sections and phasing lines / Determine velocity factor, coax loss in dB, length of coax and distance to short or open in feet / Read SWR, return loss and reflection coefficient simultaneously on 10-600+ ohm transmission lines; also shows match efficiency.

**Order ACC69 - Our Price: \$349<sup>95</sup>**



## ZAP ZC-185 Electric Field Meter

There are quite a few pocket testers for electromagnetic energy, but this one actually has the look and feel of a professional test instrument.

Designed to detect electromagnetic emanations from a large number of sources (microwave ovens, hidden transmitters, computer equipment, wireless phones, amateur and commercial two-way radios, etc.), the ZAP 185 boasts a wide frequency coverage of 3-5000 MHz (5 GHz).

For invisible applications, the unit can be kept in a pocket and a vibrator-alert mode can be selected to notify the user of a nearby transmitting device.

Weak signals are clearly detected at a respectable distance using the linear scale, while snapping the mode switch to a logarithmic scale prepare detection of much stronger signals. A large meter provides the capability of comparing relative signal levels as well as signal locating.

The ZAP 185 operates for up to 80 hours from a pair of AA alkaline cells (not included).

**Order TST18 - Our Price: \$149<sup>95</sup>**



## ZAP MODEL ZC-270

The unique feature of the Zap Checker 270 is the ability to use special antennas, band pass filters and attenuators through an SMA coaxial input connector. Depending upon the frequency and directionality of the externally connected antenna, the ZC-270 becomes a highly directional frequency-specific instrument which is ideal for counter-surveillance detection.

The optional 1.8 - 6.4 GHz Log-Periodic Antenna available with the ZC-270 boosts the sensitivity by 3 times. It also narrows the directional detection characteristics of the ZC-270 to a longer, thinner scan pattern directed along the long axis of the antenna. With prior instrumentation it was necessary to "sweep" a room by moving the detection device from 30 to 70 cm away from the walls, ceiling and floor in a raster scanning mode. That is time consuming and back-straining work! Using the Zap Checker 270 with antenna, the covert device can be initially detected from 8+ meters away from outside the room or at the door.

**Order TST15 - Our Price: \$239<sup>95</sup>**

## ZAP MODEL ZC270 w/ Antenna

**Order TST14 - Our Price: \$299<sup>95</sup>**



## Mastech MS8209 Multimeter

Ideal for gardening, environmental monitoring, and test bench functions. Applications include rare plant growing, photography, filming, video taping, OSHA measurements, auditorium acoustics control, classroom design, church sound systems and performance halls for acoustics control.

The multimeter's rugged, rubberized enclosure resists splashing and provides durability. A rear-hinged prop can stand the meter for convenient viewing. A backlight allows the unit to be clearly read in low light conditions.

A high-quality, zippered, nylon bag is provided, containing pockets to securely hold the meter—battery included-- and rubberized test leads.

**Order TST01 - Our Price: \$89<sup>95</sup>**



## Alinco DM-330MV Power Supply

This handsome, compact, voltage-variable power supply can produce over 30 amps of current—more than 500 watts—to your choice of equipment or accessories! Select 5 to 15 VDC as displayed on the back-lighted meter, and read the current drain as well! Concerned about switching noise? This supply has an adjustment to tune out any of those annoying harmonics!

Measuring only 6.9"W x 2.6"H x 6.6"D and operated by 120 VAC, voltage regulation is better than 2% with less than 15 mV ripple.

**Order PWR06 - Our Price: \$189<sup>95</sup>**



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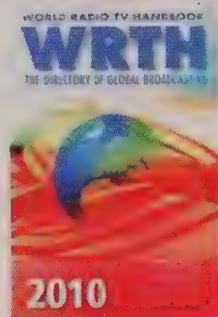


# BOOKS

## World Radio TV Handbook, 2010 Edition

This information packed reference for professional monitoring stations and serious short-wave listeners bulges with station information, staff listings, contact information, worldwide mediumwave and shortwave frequencies, and schedules for programs in all languages.

Available December 2009  
**BOK03-10 - \$29<sup>95</sup>**



# SOFTWARE

## Grove's Frequency Master File

THIS INFORMATION-PACKED CD LISTS MILITARY, FEDERAL AND SHORTWAVE SERVICES BY THE THOUSANDS! Search by frequency, location, call sign, agency or other key words, all in convenient PDF!

**Military:** NORAD, CAP, aerial refueling, National Guard, FAA control centers, VHF/UHF military aircraft and base trunking systems, Navy Fleet Control, training ranges, tactical satellite links, DOD worldwide air/ground frequencies, overseas bases, and more.

**Shortwave:** Worldwide airlines, maritime and coastal station networks, US Coast Guard, domestic and foreign international broadcasting, navigational beacons; diplomatic and government worldwide, press HF links, spy numbers transmissions, amateur and CB band plans, Air Force, Army and Navy networks globally, business, scientific, and private communications, long wave beacons, Travelers Information Stations and more.

**Federal:** From 2-420 MHz, this is the largest and most accurate listing available outside classified government files. Air Force, Navy, Coast Guard, Army, NASA, U.S. Marshals, United Nations, Customs, White House Communications, FBI, Border Patrol, IRS, Secret Service, FAA, National Strike Force, DEA, Post Office, TVA, U.S. Capitol Police, Social Security, NSA, Forest Service, FEMA, Indian Affairs, and dozens of other agencies.

Additional chapters describe federal radio systems, frequency assignment procedures, and a comprehensive by-agency table of HF (2-30 MHz) nationwide frequencies. A glossary of agency abbreviations is included.

**SPECIAL BONUS!** The comprehensive National Telecommunications and Information Agency (NTIA) Manual of Regulations and Procedures for Radio Frequency Management, as well as the NTIA color chart of the electromagnetic spectrum (3 kHz-300GHz)!

Compiled in 2004.

**Order SFT35 - Our Price: \$29<sup>95</sup>**

## Grove Radio/Television Broadcast Directory on CD-Rom

This 750-page, PDF directory of broadcasting stations in North, Central and South America, all on one CD-ROM, is authored by Monitoring Times assistant editor Larry Van Horn includes Adobe Acrobat, allowing search by frequency, call sign, location or any combination of key word(s).

Shown are the AM broadcasters for North, Central and South America as well as FM and TV-VHF and UHF listings for the U.S., Canada and Mexico. Listings include frequency, call sign, antenna configuration, location, power output for time of day/night, service designators, and station class listings and license status. A handy reference section lists informative Internet sites for radio clubs and additional station information.

**Order SFT22 - Our Price: \$19<sup>95</sup>**

## Radioreference Database on CD-ROM

This new database is a massive compendium of scanner-related frequencies and associated information across the U.S. (and even some selected listings from Canada and Mexico!). The database is extremely user friendly and self loading. Simply select your state or click on an area to download the information for your listening area.

Records are searchable by frequency, state, city/county, zip code, or trunking system. Data are arranged by geography, and include state/county/local government, airports, federal government, military aircraft, law enforcement, prisons, transportation, port operations, EMS, medevac, utilities, railroads, and even major businesses and malls.

Files include frequency (including input/output repeater pairs), call sign, licensee, use, mode, base/mobile ID, and even squelch tones. Trunking systems include talk groups with locations and frequencies as well as dec/hex numbers, alpha tags and other useful information to fully program your scanner.



**Order SFT52 - Our Price: \$29<sup>95</sup>**

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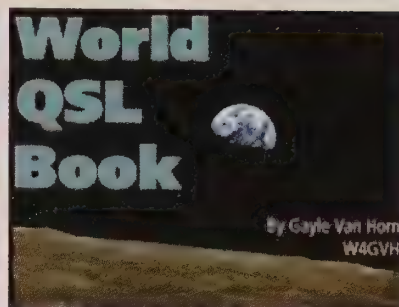


## **WORLD QSL BOOK by Gayle Van Horn on CD-Rom**

Shortwave listeners now have a single, exhaustive CD source to identify the call signs and IDs heard in the busy 2-30 MHz global spectrum. More than 500 pages cover every aspect of collecting QSL cards and other acknowledgments from stations heard in the HF spectrum. Guidance on collecting, displaying and preserving QSLs is included.

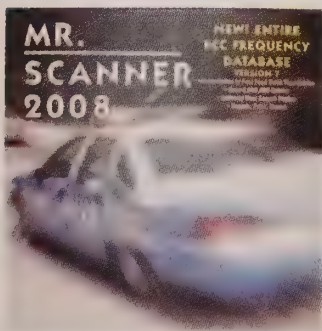
This self-loading, easy-to-use reference begins with a comprehensive tutorial on how to submit a verification report generally as well as specific details and addresses for querying international broadcasters. Successive chapters cover hams and utilities like military and Coast Guard, clandestine and pirate broadcasters, shipping and cruising industries.

A list of call signs for major communications users makes IDing simple, and a quick-check reference page features a handy table of frequency allocations for the shortwave spectrum.



**Order SFT41 - Our Price: \$19<sup>95</sup>**

## **MR. SCANNER FCC DATABASE - Latest Version!**



This information-packed CD features official FCC records of licensees by state in the 25-1300 MHz range. Includes police, fire, ambulance, hospital, railroads, business, airports, AM/FM/TV broadcasting, armored express, paging, press, public transportation, common carrier, microwave relay, and public utilities. Trunk-Tracker IDs and ten codes are also listed. Data fields which may be searched independently include frequency, city, county, call sign, and service code; includes latitude and longitude as well. Export your records by ASCII or DBase. System requirements: Pentium 133 or faster, Works best with Windows 2000 or higher, 128 meg minimum memory, 4x or faster CD-Rom drive

**Order SFT10 - Our Price: \$23<sup>95</sup>**

## **"ASK BOB" Anthology**

For more than two decades, Bob Grove's popular "Ask Bob" monthly column has been a favorite among Monitoring Times readers. Now you can enjoy reading hundreds of the most informative questions and answers submitted by readers over the years, specially chosen for this edition based upon timeliness, general appeal and importance.

Whether your interests are in antennas, scanners, shortwave, basic theory, or all these and more, this is one fascinating and informative CD you won't want to stop reading!

The Ask Bob CD contains 5 videos explaining the basics of Selectivity, Trunking, Repeaters, Dynamic Range and AC Adaptors. These videos feature Bob Grove, owner of Grove Enterprises, and Publisher of Monitoring Times magazine. System requirements to run the videos are: Pentium 400 or higher processor, 8mb video card, CD-ROM or DVD-ROM drive.

**Order SFT09 - Our Price: \$14<sup>95</sup>**

## **International Callsign Handbook, 2nd Edition**

After over a decade absence, radio monitors once again have a single, exhaustive publication to help them identify radio signals on the various radio bands.

This new CD-ROM ebook from Teak Publications, has been expanded from the print first edition and covers various callsigns and other types of radio transmission IDs used throughout the HF, VHF and UHF radio bands.

This giant 1,100 page plus callsign reference uses the Adobe Acrobat platform. All text is fully searchable and can be printed by the user.

The ten chapters in this book cover various identification types including internationally assigned callsigns (including ships), airline calls, ship and coastal maritime mobile service identification (MMSI) numbers, ALE addresses, selected aircraft selcalls, selected ICAO24 aircraft codes, and introductory material. The single largest chapter of this book has an extensive listing of tactical call words and IDs used by civilian, military, and government agencies.

This is a self-loading, easy-to-use CD-ROM ebook, and it is a must have for the active HF or scanner radio enthusiast.



**Order SFT51 - Our Price: \$19<sup>95</sup>**



## Klingenfuss 2010 Super Frequency List on CD-ROM

**Broadcast database:** Nearly 10,000 entries with the latest schedules of all clandestine, domestic and international broadcasting services on shortwave. Compiled by top experts in this field with the assistance of more than 100 experienced collaborators and monitors worldwide.

**Utility database:** Approximately 10,000 special frequencies from our international bestseller Guide to Utility Radio Stations, nearly 1000 abbreviations and 20,000 formerly active frequencies. Browse and search instantly for frequencies, countries, stations, languages, call signs, and times. And you also get the superb digital data decoding shareware program Radiocraft by French radio amateur F6FLT, and 321 new WAVECOM digital data decoder color screenshots, including the Red Cross in Iraq and Afghanistan!

A powerful word search runs under Windows 3.1/95/98/2000/ME/NT/XP/Vista, and a full text search facility is included as well. For example, enter BBC, en, and the current time and you will immediately access a customized list of all BBC stations currently broadcasting in English language! Enter DRM to retrieve all stations broadcasting in the new Digital Radio Mondiale technology! Whether you are an international radio listener, a businessman or a tourist traveling worldwide, a professional monitoring service, or a circumnavigator sailing around the globe: This is the way - just a few keystrokes and you have it all!



**Order SFT26-10 - Our Price: \$34<sup>95</sup>**

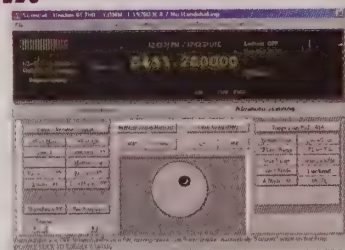
## Scancat-Gold for Windows - Latest Version!

If you own more than one radio or purchase another in the future, you never need to buy another computer control program. ScanCat-Gold for Windows is not copy protected. Use on as many computers as you wish.

Included at no extra charge, SCANPORT, an all purpose conversion utility that will read your word-processor text files, and convert them into ScanCat frequency files. Scanport for Windows also has several utilities to automatically read several CD-ROMs, plus immediately use Betty Bearcat's DBASE export files without even converting. ScanCat Gold for windows will now let you Read and Scan directly, D-Base, Access and Btrieve files. No Conversion necessary with ScanCat you have a built in ability to use those "really big" databases.

Enter any one frequency and increment up-down from that point. Enter any two frequencies and scan between them with any increment and variable time delay or pause. Scan a file of frequencies, search by description or wildcards. Create Databases of freq. files. Sort by any field, and save to disk or printer. Link up to 100 personal "Preset" frequency bands for SW, aircraft etc. including increment and mode. The most popular presets are included in the program. Link up to 100 personal frequency FILES for SW, aircraft etc.

MEMORY READ AND LOAD SPECTRUM ANALYSIS MULTIPLE SCANNING BANKS MULTIPLE SCANNING DISKFILE BANKS UNLIMITED FILE SIZES COMMA DELIMITED CONVERSION D-BASE SUPPORT DIRECT IMPORT OF MR. SCANNER'S CD-ROM EXPORT FILES AUTOMATIC BIRDIE LOCKOUT TOP HITS TABLE CTCSS AND DCS AND MUCH MUCH MORE!



**SFT02W - \$99<sup>95</sup>**

### The SE upgrade supports all Scancat Gold features, and adds:

- Hard-drive audio recording of user-selectable events with "point-and-shoot" selective playback
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- Scheduled receiver control
- Spectrum analyzer with 6 graphical methods (any 3 at a time)
- Waterfall display (Z-axis) over time with multicolor signal-spike differentiation
- Mouse-cursor selection of signal spikes for instant access
- Log signal strength, airtime, CTCSS tones (if radio supported)
- Plot, activate, and analyze other databases up to three screens at a time
- Analyze hits on a frequency by histogram of signals strength or number of hits
- Cascade up to 6 CI-V addressable radios at one time
- Master/slave interactivity for any ICOM or Opto-boarded PRO 2xxx scanner

**(NOTE: Scancat-Gold for Windows 7.0 or greater, SFT-02W, required for SE Upgrade). Requires Windows 3.x or higher, 5 MB hard drive free, 16 MB RAM, VGA monitor**

**SFT02SE - \$59<sup>95</sup>**

SFT2W required

## ScanCat Lite Plus for Windows

This Scancat program supports the memory programming for Radio Shack and Uniden Scanners and at a price that anyone can afford. While the regular Scancat-GOLD supports both memory programming and scanning from the PC, the new Scancat-Lite PLUS is targeted to those radio owners that need to program the radio's memories, but do not need the additional scanning control.

**SFT19 - \$29<sup>95</sup>**

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